

1986

# The State of Utah and Through the Utah State Department of Social Services and Mary A. Turpin v. Edward L. Woods : Brief of Appellant

Utah Supreme Court

Follow this and additional works at: [https://digitalcommons.law.byu.edu/byu\\_sc1](https://digitalcommons.law.byu.edu/byu_sc1)



Part of the [Law Commons](#)

Original Brief Submitted to the Utah Supreme Court; digitized by the Howard W. Hunter Law Library, J. Reuben Clark Law School, Brigham Young University, Provo, Utah; machine-generated OCR, may contain errors.

Mark S. Miner; Attorney for Appellant.

Sandy Mooy; Deputy County Attorney; Attorney for Respondents.

---

## Recommended Citation

Brief of Appellant, *Utah v. Woods*, No. 860163.00 (Utah Supreme Court, 1986).  
[https://digitalcommons.law.byu.edu/byu\\_sc1/1015](https://digitalcommons.law.byu.edu/byu_sc1/1015)

This Brief of Appellant is brought to you for free and open access by BYU Law Digital Commons. It has been accepted for inclusion in Utah Supreme Court Briefs by an authorized administrator of BYU Law Digital Commons. Policies regarding these Utah briefs are available at [http://digitalcommons.law.byu.edu/utah\\_court\\_briefs/policies.html](http://digitalcommons.law.byu.edu/utah_court_briefs/policies.html). Please contact the Repository Manager at [hunterlawlibrary@byu.edu](mailto:hunterlawlibrary@byu.edu) with questions or feedback.

UTAH COURT OF APPEALS  
BRIEF

UTAH  
DOCUMENT  
FILE

IN THE SUPREME COURT

STATE OF UTAH

860163-CA

\* \* \* \* \*

THE STATE OF UTAH, BY AND )  
THROUGH THE UTAH STATE )  
DEPARTMENT OF SOCIAL )  
SERVICES and MARY A. TURPIN, )  
Plaintiffs-Respondents, )  
vs. )  
EDWARD L. WOODS, )  
Defendant-Appellant. )

*860163-CA*  
Supreme Court No. 21051  
District Court No.  
C-83-6237  
District Court Judge  
J. Dennis Frederick  
*Category 14*

\* \* \* \* \*

APPELLANT'S BRIEF ON APPEAL

\* \* \* \* \*

On Appeal from the Third Judicial District Court  
of Salt Lake County, State of Utah  
The Honorable J. Dennis Frederick Presiding

SANDY MOOY  
Deputy County Attorney  
3195 South Main Street  
P.O. Box 15450  
Salt Lake City, Utah 84115

Attorney for Respondents

MARK S. MINER (A2273)  
525 Newhouse Building  
10 Exchange Place  
Salt Lake City, Utah 84111  
Telephone: (801) 363-1449

Attorney for Appellant  
Edward L. Woods

FILED

MAY 14 1986

Clerk, Supreme Court, Utah

IN THE SUPREME COURT

STATE OF UTAH

\* \* \* \* \*

THE STATE OF UTAH, BY AND	)	
THROUGH THE UTAH STATE	)	
DEPARTMENT OF SOCIAL	)	
SERVICES and MARY A. TURPIN,	)	Supreme Court No. 21051
	)	
Plaintiffs-Respondents,	)	District Court No.
	)	C-83-6237
vs.	)	
	)	District Court Judge
EDWARD L. WOODS,	)	J. Dennis Frederick
	)	
Defendant-Appellant.	)	
	)	

\* \* \* \* \*

APPELLANT'S BRIEF ON APPEAL

\* \* \* \* \*

On Appeal from the Third Judicial District Court  
of Salt Lake County, State of Utah  
The Honorable J. Dennis Frederick Presiding

SANDY MOOY  
Deputy County Attorney  
3195 South Main Street  
P.O. Box 15450  
Salt Lake City, Utah 84115

Attorney for Respondents

MARK S. MINER (A2273)  
525 Newhouse Building  
10 Exchange Place  
Salt Lake City, Utah 84111  
Telephone: (801) 363-1449

Attorney for Appellant  
Edward L. Woods

LIST OF ALL PARTIES

1. Appellant, Edward L. Woods, represented by Mark S. Miner, 525 Newhouse Building, 10 Exchange Place, Salt Lake City, Utah 84111.
2. Respondents, The State of Utah by and through the Utah State Department of Social Services, and Mary A. Turpin, represented by Sandy Mooy, Deputy County Attorney, 3195 South Main Street, P.O. Box 15450, Salt Lake City, Utah 84115-0450.

TABLE OF CONTENTS

	<u>Page</u>
LIST OF ALL PARTIES . . . . .	i
TABLE OF CONTENTS . . . . .	ii
TABLE OF AUTHORITIES . . . . .	iv
STATUTORY PROVISIONS . . . . .	iv
CASES . . . . .	iv
STATEMENT OF ISSUE PRESENTED ON APPEAL . . . . .	1
STATEMENT OF FACTS . . . . .	2
I. DR. CHARLES DEWITT, PHD, WAS TOTALLY UNQUALIFIED TO TESTIFY IN THIS CASE . . . . .	4
II. GREG CARLSON IS THE FATHER OF ANGELA TURPIN . . . . .	6
DETERMINATIVE STATUTES . . . . .	9
SUMMARY OF ARGUMENT . . . . .	9
ARGUMENT . . . . .	13
CONCLUSION . . . . .	16
ADDENDUM	
Exhibit A. JUDGMENT, ORDER AND DECREE JUNE 25, 1985	
Exhibit B. JUDGMENT AND ORDER NOVEMBER 12, 1986	
Exhibit C. NOTICE OF INTENT TO APPEAL	
Exhibit D. MINUTE ENTRY APRIL 12, 1985	
Exhibit E. MINUTE ENTRY OCTOBER 1, 1985	
Exhibit F. AMENDED NOTICE OF APPEAL	
Exhibit G. NOTICE OF APPEAL	

TABLE OF CONTENTS (CON'T)

Exhibit H.	PHILLIPS v. JACKSON CASE
Exhibit 3.	LEUKOCYTE PHENOTYPING TRAY WORKSHEET (Mary Carlson)
Exhibit 4.	LEUKOCYTE PHENOTYPING TRAY WORKSHEET (Child)
Exhibit 5.	LEUKOCYTE PHENOTYPING TRAY WORKSHEET (Edward Woods)
Exhibit 7.	HLA COMPREHENSIVE TRAY
Exhibit 8.	EXTENDED RED CELL CHART
Exhibit 9.	PARTIAL HOSPITAL RECORDS
Exhibit 10.	LETTER FROM SANDY MOOY
Exhibit 11.	LETTER FROM DR. CHARLES DEWITT APRIL 26, 1984
Exhibit 12.	LETTER FROM DR. CHARLES DEWITT OCTOBER 25, 1983

## TABLE OF AUTHORITIES

<u>Statutory Provisions</u>	<u>Page</u>
<u>Utah Code Ann.</u> , Section 78-25-18, 1953 as amended . . . . .	9
<u>Utah Code Ann.</u> , Section 78-45-A-7, 1953 as amended . . . . .	9
<u>Utah Code Ann.</u> , Section 78-45-A-10, 1953 as amended . . . . .	9
Chapter 45(a) of Title 78, <u>Utah Code Ann.</u> , 1953 as amended . . . . .	9
 <u>Cases</u>	
<u>Antmid Incorporated v. Fjell-Orange Lines</u> , (Seventh Circuit 1972) 458 Fed 2d, 712 . . . . .	16
<u>Coastal State Gas Producing Company v.</u> <u>Locker</u> (TexCivApp 1968) 436 S.W. 2d, 592 . . . . .	16
<u>Mucci v. LeMonte</u> , 157 Ct 566, 254 A.2d 879 . . . . .	16
<u>Noland v. Mutual of Omaha Insurance Company</u> , (1973), 57 Wisconsin 2d 663, 205 N.W. 2d 388 . . . . .	16
<u>Novakofski v. State Farm Mutual Insurance Company</u> , 34 Wisconsin 2d 154, 148 N.W. 2d 714 . . . . .	16
<u>Deborah J. Phillips v. Jeffery Jackson</u> , Utah Supreme Court No. 15618 . . . . .	3,16

## STATEMENT OF ISSUES PRESENTED ON APPEAL

1. MAY THE BLOOD TEST OF THE FATHER WHICH WAS TAKEN ON OCTOBER 20, 1983, IN ANOTHER CASE TO-WIT: THE CASE OF DEPARTMENT OF SOCIAL SERVICES AND BONNIE MILLER JOHNS V. EDWARD L. WOODS, BE RESURRECTED AND USED IN THE INSTANT CASE TO-WIT: TURPIN V. WOODS, MORE THAN A YEAR LATER, AND ALSO BE USED IN THE LABORATORY COMPUTATIONS OF THE SCIENTIFIC TEST KNOWN AS THE HLA (HUMAN LEUCOCYTES ANTIGEN TEST). THE 10/20/83 TEST SHOWS EDWARD WOODS TO BE ABO TEST TYPE O., PHENOTYPES A1, A29, B8, AND B45. IN THIS CASE TO-WIT: MARY TURPIN V. EDWARD L. WOODS, THE LABORATORY TEST DATED 1/27/84 SHOWS EDWARD WOODS TO BE ABO TEST TYPE O, HLA PHENOTYPE ANTIGENS A1, A29, B8, AND B44.

2. IS DR. CHARLES DEWITT, A PHD, ENTITLED TO ADOPT AN OPINION AS TO THE PATERNITY OF THE FATHER ON THE BASIS OF A WORKSHEET AND ON THE BASIS OF A HLA TEST PREPARED AND PUBLISHED BY HIS LABORATORY ASSISTANT, PAULA SIMENSON POGLAGEN, A TOTALLY UNQUALIFIED MEDICAL TECHNICIAN. (SEE EXHIBIT "5", SEE ADDENDUM).

3. IS DR. CHARLES DEWITT, A PHD, ENTITLED TO BASE HIS OPINION AS TO PATERNITY ON AN HLA TEST WHICH WAS CONDUCTED IN ITS ENTIRETY, WITHOUT SUPERVISION, BY HIS LABORATORY ASSISTANTS. ALSO, MAY THE COURT ADMIT ALL THE HLA TESTS TO-WIT, THE TEST OF 10/20/83 AND THE TEST OF 1/27/84 INTO EVIDENCE, IN VIOLATION OF THE HEARSAY RULE, UPON THE GROUNDS THAT THE HLA TESTS ARE HOSPITAL RECORDS, AND THEREBY PREVENT THE PLAINTIFF FROM THE RIGHT OF CROSS-EXAMINATION OF THE LABORATORY TECHNICIANS CONCERNING THE JUDGMENTAL TEST AND CONCERNING THE TEST OPINION RESULTS.



4. MAY THE TRIAL JUDGE DISREGARD ALL SCIENTIFIC TEST; AND, THE FACT THAT THE FATHER DID NOT HAVE ACCESS TO THE MOTHER DURING THE TIME THAT SHE CONCEIVED; AND, MAY HE FURTHER DISREGARD THE FACT THAT THE MOTHER HAD HERPES AND OTHER VENEREAL DISEASES WHEN THE TRIAL TRANSCRIPT CONCLUSIVELY SHOWED THAT THE FATHER HAD NONE; AND, FIND THAT EDWARD L. WOODS WAS THE FATHER ON THE TESTIMONY OF THE MOTHER, MARY A. TURPIN.

#### STATEMENT OF FACTS

MARY A. TURPIN, THE MOTHER OF ANGELA A. TURPIN BORN ON JULY 22, 1983, TESTIFIED THAT EDWARD L. WOODS WAS THE NATURAL FATHER OF ANGELA A. TURPIN, AND THAT SHE (MARY) HAD SEXUAL INTERCOURSE WITH EDWARD L. WOODS AND NO OTHER INDIVIDUAL. EDWARD L. WOODS CONTROVERTED THIS EVIDENCE BY TESTIFYING THAT HE DID NOT HAVE ACCESS TO HER (MARY) DURING THE PERIOD WHEN THE CHILD COULD HAVE BEEN CONCEIVED. IN ADDITION THERETO, THE HOSPITAL RECORDS SHOWED THAT MARY A. TURPIN WAS AFFLICTED WITH THE HERPES; AND, THAT EDWARD L. WOODS WAS NOT AFFLICTED WITH THE HERPES. SEE (TR 277) AND EXHIBIT "9" (HOSPITAL RECORDS ANNEXED HERETO AND BY REFERENCE MADE A PART HEREOF). THE TESTIMONY OF EDWARD L. WOODS, THE TESTIMONY OF HIS FATHER RALPH WOODS, AND EDWARD WOOD'S MEDICAL RECORDS ALL SHOWED THAT EDWARD L. WOODS DID NOT HAVE HERPES AND HAS NEVER HAD THE HERPES. (TR-201)

DR. CHARLES DEWITT, PHD, TESTIFIED THAT IN HIS OPINION EDWARD L. WOODS WAS THE FATHER OF THE CHILD AND BASED HIS CONCLUSION ON A LABORATORY WORKSHEET AND ON A HLA TEST WHICH WAS UNSUPERVISED AND WHICH WAS PREPARED BY ONE OF HIS LABORATORY EMPLOYEES, PAULA (SIMENSON) POGLAGEN. DR. CHARLES DEWITT DID NOT CONDUCT THE TEST IN ANY RESPECT, NOR DID HE SUPERVISE THE TEST (SEE TR-122, TR-123, TR-124, AND TR-147). DR. CHARLES DEWITT ADMITTED THAT THE BLOOD SUPPOSEDLY ANALYZED WAS TAKEN IN ANOTHER PATERNITY CASE TO-WIT: IN THE CASE OF DEPARTMENT OF SOCIAL SERVICES AND BONNIE MILLER (JOHNS) V. EDWARD L. WOODS (EXHIBIT "5", SEE ADDENDUM). THE BLOOD THAT WAS TAKEN IN THE BONNIE MILLER (JOHNS) MATTER WAS TAKEN APPROXIMATELY MORE THAN A YEAR PRIOR TO THE CONCEPTION OF ANGELA A. TURPIN, THE CHILD NAMED HEREIN. THE RESULTS OF THE MILLER (JOHNS) CASE WERE THEN SUPPOSEDLY BROUGHT OVER AND TRANSFERRED TO THE ABOVE ENTITLED CAUSE (EXHIBITS "11" & "12", SEE ADDENDUM), (SEE ALSO EXHIBIT "5"). THE PERSON WHO SUPPOSEDLY PERFORMED THE TEST IN THE BONNIE MILLER JOHNS CASE, WAS NEVER CALLED AS A WITNESS, BUT WAS IDENTIFIED BY DR. CHARLES DEWITT AS, PAULA (SIMENSON) POGLAGEN, THE SAME MEDICAL TECHNOLOGIST THAT HAD PERFORMED THE TEST IN THE CASE OF DEBORAH J. PHILLIPS V. JEFFERY JACKSON, UTAH SUPREME COURT CASE NO. 15618. DR. CHARLES DEWITT FURTHER TESTIFIED THAT THE ANTIGEN B44 AND THE ANTIGEN B45 ARE ONE AND THE SAME EVEN THOUGH THEY ARE OF DIFFERENT NUMBERS AND WERE TESTED BY DIFFERENT

-----

SERA. ANTIGEN B44 IS TESTED BY SERUM NO. L0849.01; AND, ANTIGEN B45 IS TESTED BY SERUM M5267. (SEE EXHIBIT "5"), (SEE ALSO EXHIBITS "11" & "12"), TO-WIT: PLEASE NOTE THAT EDWARD L. WOODS TESTED B45, AND PLEASE NOTE THAT THE CHILD TESTED B44. IRREGARDLESS OF THESE LABORATORY TESTS, WHICH ARE ALL JUDGMENT TESTS ON THE PART OF THE LABORATORY TECHNICIAN, DR. DEWITT TESTIFIED THAT THESE TESTS CONCLUSIVELY SHOWED THAT EDWARD L. WOODS WAS THE FATHER WITH COMPLETE 94% PROBABILITY.

I. DR. CHARLES DEWITT, PHD, WAS TOTALLY UNQUALIFIED TO TESTIFY IN THIS CASE.

THERE WAS NO FOUNDATION, OTHER THAN GENERALITIES CONCERNING DR. CHARLES DEWITT'S TESTIMONY. HE WAS NOT PRESENT WHEN ANY OF THE BLOOD SAMPLES WERE DRAWN. HE DOESN'T KNOW FROM WHOM THE BLOOD WAS DRAWN, OR HOW IT WAS TESTED. (TR-118) CHARLES DEWITT HAS A BACHELOR OF SCIENCE DEGREE FROM THE MORRIS HARVEY COLLEGE, A DOCTORS DEGREE IN PHILOSOPHY, AND DOCTORATE DEGREE IN IMMUNOLOGY FROM THE OHIO STATE UNIVERSITY. ALL OF HIS DEGREES AND ALL OF HIS COURSES IN IMMUNOLOGY OF INFECTIOUS DISEASES WERE TAKEN OVER 30 YEARS AGO, LONG PRIOR TO HLA TESTING. DR. CHARLES DEWITT HAS NO SCHOOLING AND NO TRAINING IN ANY UNIVERSITY CONCERNING THE HLA TESTING (SEE TR-121).

PLEASE NOTE:

- Q. SO YOU HAVE NO SCHOOLING OR TRAINING IN ANY UNIVERSITY OTHER THAN YOU SAY YOU WERE ONE OF THE ORIGINAL INVESTIGATORS; IS THAT RIGHT?
- A. YES SIR. (SEE TR-121)

Q. AND YOU'RE NOT A MEDICAL DOCTOR AND YOU DON'T CLAIM TO BE ONE, IS THAT RIGHT?

A. THAT'S CORRECT. (SEE TR-121)

Q. YOU TESTIFY FREQUENTLY FOR MR. MOOY, I GUESS. HOW MANY TIMES HAVE YOU TESTIFIED?

A. I REALLY DON'T KNOW, APPROXIMATELY 40 TIMES A YEAR, BUT NOT FOR MR. MOOY. (SEE TR-123)

DR. CHARLES DEWITT DID NOT KNOW WHAT BLOOD WAS TESTED OR HOW IT WAS TESTED, AND HE WAS NOT THERE NOR DOES HE KNOW WHAT THEY DID WITH THE BLOOD. (SEE TR-124 AND TR-125).

DR. CHARLES DEWITT WAS NOT PRESENT WHEN THE RESULTS OF THE HLA TEST WERE RUN AND THE RESULTS REDUCED TO WRITING. (SEE EXHIBITS "3" "4", & "5", SEE ADDENDUM) AND (TR-126). THE TRIAL JUDGE ADMITTED THE HLA TEST INTO EVIDENCE AS A HOSPITAL BUSINESS RECORD. THIS WAS DONE EVEN THOUGH THE RECORDS WERE ALL BASED ON HEARSAY EVIDENCE AND CONTAINED CONCLUSIONS, JUDGMENTS, AND OPINIONS WHICH CONCERNED THE CRUCIAL ISSUE IN THE CASE. THE HLA TEST CONTAINED AN OPINION WHICH WAS BASED SOLELY ON JUDGMENT AND THE EVIDENCE SHOULD HAVE BEEN EXCLUDED AS THE OPINION WAS JUDGMENTAL, AND THE OPINION GIVER DID NOT HAVE AN ADEQUATE FACTUAL BASIS FOR HER OPINION.

EXHIBITS "3", "4", & "5" SHOW THAT MARY CARLSON (TURPIN) IS AN HLA PHENOTYPE ANTIGENS A2, B44, AND B60. ANGELA TURPIN (BABY) IS IN BLOOD GROUP A, HLA PHENOTYPE A2, A29, B44, AND B60. (TR-128). EDWARD L. WOODS IS IN ABO GROUP O, HLA PHENOTYPE ANTIGENS A1, A29, B8, AND B45.

-----

II. GREG CARLSON IS THE FATHER OF ANGELA TURPIN.

MR. GREG CARLSON, (MARY CARLSON'S PRESENT HUSBAND) TESTED AS FOLLOWS: ABO GROUP O, HLA PHENOTYPE ANTIGENS A2, B44. (SEE TR-138 AND EXHIBITS "7" & "8" TAKEN SEPTEMBER 26, 1984, SEE ADDENDUM). PLEASE NOTE THAT EXHIBIT "7" HAS OBVIOUSLY BEEN ALTERED. SEE LINE DRAWN THROUGH A2, SEE ALSO THAT DR. DEWITT FAILED TO SHOW ANTIGEN "B60". GREG CARLSON HAS THREE ANTIGENS TO-WIT: A2, B44, B60, ALL OF WHICH WERE TRANSFERRED TO ANGELA TURPIN. (SEE TR-138) AND (EXHIBITS "6", "7", & "8").

EDWARD L. WOODS, WHO WAS BLED ON OCTOBER 25, 1983, FOR THE PURPOSE OF A TEST TO BE USED IN JOHNS V. WOODS, SHOWED THE FOLLOWING RESULTS: PHENOTYPE ANTIGENS A1, A29, B8, AND B45. (TR-154). EDWARD L. WOODS HAS ONLY ONE ANTIGEN SIMILAR TO ANGELA TURPIN TO-WIT: A29. (SEE EXHIBIT "5").

DR. CHARLES DEWITT TESTIFIED THAT IF EDWARD L. WOODS WAS TESTED ON OCTOBER 25, 1983, (SEE EXHIBIT "12") AND THE TEST SHOWED HE WAS PHENOTYPE ANTIGENS A1, A29, B8 AND B45 IN OCTOBER OF 1983, HE WOULD BE THE SAME TODAY. (TR-154). DR. CHARLES DEWITT HAD NO RECOLLECTION OF THE TEST OTHER THAN THE FACT THAT THE EXHIBITS WERE HANDED TO HIM BY SOMEONE. DR. DEWITT ADMITS THAT HE WROTE TWO CONFLICTING LETTERS OVER HIS SIGNATURE. (SEE EXHIBITS "11" & "12"), AND (SEE EXHIBIT "5", THE FIRST SHEET).

ALSO, SEE THE RESULTS OF THE OCTOBER 25, 1983, REPORT (THE JOHNS CASE) WHICH SHOWED EDWARD L. WOODS AS PHENOTYPE ANTIGENS A1, A29, B8 AND B45.

IN THIS CASE (TURPIN V. WOODS) DR. CHARLES DEWITT TESTIFIED THAT EDWARD L. WOODS PASSED PHENOTYPE ANTIGENS A1, A29, B8, AND "B45". SEE (TR-163) AND (TR-164) OF THE TRIAL TRANSCRIPT WHERE DR. CHARLES DEWITT TESTIFIED AS FOLLOWS:

Q. WHY DID YOU PUT B45 IN YOUR OCTOBER LETTER WHEN IT WAS B44?

A. I DON'T REMEMBER AT THIS TIME.

SEE ALSO DR. CHARLES DEWITT'S TESTIMONY, (TR-158):  
"EDWARD L. WOODS COULD HAVE A1, B44 AS ONE PAIR, AND A29, B8 AS ANOTHER PAIR, THESE PAIRS PASSES WITH THE SPERM" \*\*\*\*\*

THE TRUTH OF THE MATTER IS, THAT EDWARD WOODS NEVER POSSESSED THE ANTIGEN B44, BUT AT ALL TIMES TESTED, A1, A29, B8, AND B45. (SEE EXHIBIT "12", LETTER OF 1983, WRITTEN, ISSUED, AND SIGNED BY DR. CHARLES DEWITT'S SIGNATURE).

DR. CHARLES DEWITT CONCEDED THAT THERE WAS NO RBC TEST, NO DUFFY TEST, AND NO KELL TEST AS FAR AS EDWARD L. WOODS WAS CONCERNED. DR. CHARLES DEWITT ANSWERED ALL QUESTIONS GENERALLY. HE STATED THAT HE HAD PAPERS PUBLISHED IN MANY JOURNALS BUT FAILED TO MENTION OR IDENTIFY EVEN ONE PAPER OR JOURNAL THAT PUBLISHED HIS ARTICLES (SEE TR-104). HE FURTHER TESTIFIED THAT THE LABORATORY HAD CONTROLLED STUDIES. YET, HE FAILED TO SHOW THAT HIS HLA TESTS FELL WITHIN THE ALLOWABLE

-----

STANDARD DEVIATIONS. DR. CHARLES DEWITT DID NOT TESTIFY AS TO THE PROCEDURE OF ANY OF THE TESTS WHICH WERE PERFORMED EVEN THOUGH HE KNEW THAT THIS EVIDENCE WAS NECESSARY IN ORDER TO PROVIDE PROPER FOUNDATION OF THESE TESTS.

DR. CHARLES DEWITT TESTIFIED THAT MARY CARLSON IS IN ABO BLOOD GROUP A, HLA PHENOTYPE ANTIGENS A2, B44, AND B60 (THE TEST CONTAINED THREE ANTIGENS ONLY WHEN THERE SHOULD BE FOUR). DR. DEWITT FURTHER TESTIFIED THAT ANTIGENS PRODUCED BY CHROMOSOMES COMES IN PAIRS. MARY CARLSON WAS ONLY GIVEN THREE ANTIGENS. SO, ONE IS OBVIOUSLY MISSING (TR-273). WHEN QUESTIONED CONCERNING GREG CARLSON, DR. CHARLES DEWITT SAID THAT HE (GREG CARLSON) COULD NOT BE THE FATHER IN THAT HE DID NOT POSSESS ANTIGEN A29. DR. CHARLES DEWITT REFUSED TO CONCEDE THAT THIS ANTIGEN COULD HAVE COME FROM MARY CARLSON, NOR COULD HE EXPLAIN WHY HE GAVE HER (MARY A. TURPIN) ONLY THREE ANTIGENS: A2, B44, B60. DR. CHARLES DEWITT FAILED TO ADEQUATELY EXPLAIN WHY MARY CARLSON WAS ONLY GIVEN THREE ANTIGENS, IN THAT HE SUBSEQUENTLY TESTIFIED HE GAVE EQUAL WEIGHT TO ALL ANTIGENS AND TO ALL POSSIBILITIES. IN THIS REGARD, HE TESTIFIED THAT EDWARD L. WOODS COULD HAVE PASSED 1-8, 1-44, 29-8, 29-44 (PLEASE NOTE THAT THE ONLY COMMON ANTIGEN THAT EDWARD L. WOODS HAD WITH THE CHILD WAS A29). BY THIS TESTIMONY, HE GAVE MORE WEIGHT TO A29 THAN HE DID A2, OR B60. IT APPEARS THAT CHARLES DEWITT MADE THE ASSUMPTIONS FIT THE RESULT THAT HE WISHED TO OBTAIN. GREG

CARLSON, THE "SO-CALLED" STEP-FATHER, WAS CAPABLE OF PASSING THREE ANTIGENS, A2, B44, (B60), (SEE EXHIBIT "7"). EDWARD WOODS WAS ONLY CAPABLE OF PASSING A1, A29, B8, AND B45. THIS WAS IN DIRECT CONTRADICTION OF DR. DEWITT'S TESTIMONY, LABORATORY TESTS, AND THEORIES (TR-158). THE FOREGOING PHENOTYPE ANTIGEN TESTS ARE IN COMPLETE CONTRADICTION WITH DR. DEWITT'S TESTIMONY.

DR. CHARLES DEWITT ADMITS THAT HE PLACED EDWARD L. WOODS IN GROUP B45 IN OCTOBER OF 1983, AND THAT HE NOW, APRIL 12, 1985, PLACES HIM IN B44. (SEE EXHIBITS "11" & "12"), (SEE ALSO TR-163).

#### DETERMINATIVE STATUTES

78-45-A-7, U.C.A. 1953, AS AMENDED.

78-25-18, U.C.A. 1953, AS AMENDED.

CHAPTER 45A OF TITLE 78, U.C.A. 1953, AS AMENDED.

78-45-(A)-10, U.C.A. 1953, AS AMENDED.

#### SUMMARY OF ARGUMENT

THE ABOVE-ENTITLED CAUSE FIRST CAME TO TRIAL ON APRIL 12, 1985. THE ISSUE OF PATERNITY CAME BEFORE THE COURT ON APRIL 12, 1985, AND AT SAID HEARING THE COURT BIFURCATED AND DIVIDED THE CASE INTO TWO PARTS. THE PATERNITY AND THE PATERNITY ONLY

-----



WAS DULY HEARD ON THE 12TH DAY OF APRIL, 1985. THE COURT SPECIFICALLY CONTINUED SAID CAUSE TO OCTOBER 1, 1985, AT WHICH TIME THE ISSUE OF SUPPORT MONEY AND THE PAYMENT OF MEDICAL BILLS WAS DULY HEARD AND DETERMINED. THE DEFENDANT, EDWARD L. WOODS, IMMEDIATELY FILED HIS INTENT TO APPEAL THE JUDGMENT WHICH WAS MADE AND ENTERED ON APRIL 12, 1985. THE ORDER BIFURCATING THE CASE WAS MADE AND ENTERED ON APRIL 12, 1985. THE FINAL ORDER IN SAID CAUSE WAS SIGNED BY THE HONORABLE J. DENNIS FREDERICK, DISTRICT JUDGE, ON NOVEMBER 12, 1985. SAID CAUSE WAS DULY APPEALED TO THE ABOVE ENTITLED COURT ON THE 6TH DAY OF DECEMBER, 1985. SAID APPEAL WAS TIMELY TAKEN.

SEE ADDENDUM AND SEE TR-287:

BY MR. MINER: "THE ORDER THAT WILL BE SIGNED NOW IS A FINAL ORDER?"

THE COURT: "THE FINAL ORDER IN THIS CASE."

MR. MINER: "THANK YOU."

THE SOCIAL SERVICE DEPARTMENT OF THE STATE OF UTAH INITIATED THIS LAWSUIT IN AN ATTEMPT TO ESTABLISH THAT EDWARD L. WOODS WAS THE FATHER OF A CHILD BORN OUT OF WEDLOCK TO MARY A. TURPIN. SAID SUIT WAS ALSO BROUGHT TO COMPEL EDWARD L. WOODS TO SUPPORT THE CHILD. THE COURT FOUND EDWARD L. WOODS TO BE THE FATHER OF THE CHILD AND ORDERED HOSPITAL BILLS TO BE PAID AND SUPPORT PAYMENTS TO BE PAID.

THE CENTRAL ISSUE BEFORE THE COURT ON THIS APPEAL IS WHETHER THE TRIAL COURT ERRED IN ADMITTING THE RESULTS OF A SCIENTIFIC TEST KNOWN AS THE HLA (HUMAN LEUCOCYTE ANTIGEN TEST)

-----

WHICH PURPORTEDLY ATTEMPTED TO PROVE THAT EDWARD L. WOODS TO BE THE FATHER OF THE CHILD IN THIS CASE TO A 94% PROBABILITY. THIS SCIENTIFIC TEST WAS ADMITTED INTO EVIDENCE STRICTLY AS A BUSINESS RECORD IN DIRECT VIOLATION OF THE HEARSAY RULE. THIS WAS ERROR, IN THAT THE BUSINESS RECORD EVIDENCE ACT APPLIES TO RECORDS OF "AN ACT, CONDITION, OR EVENT." IT DOES NOT INCLUDE OPINIONS OR DIAGNOSIS. THE COURTS ARE RELUCTANT TO ADMIT HOSPITAL RECORDS AS AN EXCEPTION TO THE HEARSAY RULE WHEN THE RECORDS INCLUDE OPINION OR DIAGNOSIS, AND WHEN THE ADMITTED DOCUMENT BARES ON THE CRUCIAL ISSUE IN THE CASE. THIS IS ESPECIALLY TRUE WHERE THE OPINION GIVER WAS NOT A QUALIFIED EXPERT, AND WHERE THE CIRCUMSTANCES INDICATE THAT THE OPINION GIVER DID NOT HAVE AN ADEQUATE, FACTUAL BASIS FOR THEIR OPINION. SEE EXHIBIT 5, P.2, IN WHICH THE LABORATORY TEST CONCLUSIVELY SHOWS THAT EDWARD L. WOODS IS PHENOTYPE ANTIGEN B45, AND THAT THIS RESULT WAS OBTAIN BY USING SERUM 5267. IN THIS REGARD, PLEASE NOTE THAT ON (PAGE 2 OF EXHIBIT "5") EDWARD L. WOODS' PHENOTYPE ANTIGEN B44 IS OBTAINED BY USING SERUM L9849.01. ON PAGE 2 OF EXHIBIT 5 IT ALSO SHOWS THAT THE PHENOTYPE ANTIGEN GROUPS OBTAINED WERE, A1, A29, B8, AND B45. DR. DEWITT'S LETTER OF OCTOBER 25, 1983, (EXHIBIT 12) SHOWS EDWARD L. WOODS AS TYPE O, AND PHENOTYPE A1, A29, B8, AND (B45). FOR SOME UNKNOWN REASON, DR. CHARLES W. DEWITT IN (EXHIBIT 11), SHOWS EDWARD L. WOODS AS PHENOTYPE TYPE A1, A29, B8, AND (B44). SAID EXHIBIT DATED APRIL 26, 1984, AND ANNEXED HERETO AS

-----

DEFENDANT'S (EXHIBIT 11) AND BY REFERENCE MADE A PART HEREOF. (EXHIBIT 11) FURTHER SHOWS THAT DR. CHARLES DEWITT PHENOTYPED THE MOTHER AS PHENOTYPE ANTIGENS A2, A2, B44, B60. FOR REASONS KNOWN ONLY TO DR. CHARLES W. DEWITT, HE LISTED THE "A2" ANTIGEN TWICE, ALL OF WHICH EXPOSES ANOTHER COMPLETE ERROR. IN DIRECT DISREGARD TO THE LABORATORY FINDINGS AND TO DR. CHARLES DEWITT'S LETTER OF APRIL 26, 1984, HE INCREASED THE PROBABILITY OF THE FATHER FROM 90% TO 94% (SEE EXHIBIT 11). DR. CHARLES DEWITT'S LETTER IS IN COMPLETE CONFLICT WITH DEFENDANT'S (EXHIBIT 5), AND (EXHIBIT 5) IS IN CONFLICT WITH ITSELF; IN THAT THE TRAY WORKSHEET OF (EXHIBIT 5) SHOWS "6" OPPOSITE B44 AND "1" OPPOSITE B45, WHILE THE SECOND TRAY WORKSHEET SHOWS NO REACTION ON B44, AND "4" REACTION ON B45. DR. CHARLES DEWITT BASED HIS OPINION ON WORKSHEETS PREPARED EXCLUSIVELY BY OTHER PERSONS EVEN THOUGH THE TESTS AND REPORTS CONTAINED OPINIONS ON THE CRUCIAL ISSUE IN THE CASE AND WERE BASED ON JUDGMENTAL FACTORS.

THE HLA TEST TESTIFIED TO HEREIN FAILED TO MEET THE REQUIREMENTS OF A SUFFICIENT FOUNDATION. ACCURACY AND RELIABILITY OF METHODS UTILIZED ARE IN CONFLICT AND ARE COMPLETELY LACKING IN ACCURACY. THE LABORATORY TECHNICIANS WHO DID THE BASIC WORKUP TESTS WERE CLEARLY NOT QUALIFIED NOR WERE THEY PRESENT IN COURT TO TESTIFY TO THEIR JUDGMENTAL FINDINGS AS TO WHAT THEY DID OR HOW THEY DID IT. DR. DEWITT'S TESTIMONY CONCERNING THE TESTS WAS PURE HEARSAY, INCORRECT, AND IN CONFLICT WITH THE TESTS

-----

THEMSELVES. DR. DEWITT'S TESTIMONY WAS GENERAL, VAGUE, AND UNRELATED TO THE SPECIFIC REQUIREMENTS NECESSARY TO ESTABLISH A FOUNDATION FOR THE TEST. THE TABLE OF PERCENTAGES WHICH WERE USED WERE HIS OWN AND HAD NOT BEEN APPROVED OR ACCEPTED BY ANYONE (SEE TR-155). THERE WAS NO EVIDENCE OF A MNSS, KELL, DUFFY, OR KID TEST (SEE TR-130). DR. DEWITT FAILED TO TESTIFY WHY THESE TESTS WERE NOT GIVEN. THE ERRONEOUS HLA TEST WAS WITHOUT PROPER FOUNDATION AND CLEARLY SHOWED PREJUDICIAL ERROR. EDWARD L. WOODS, THE DEFENDANT HEREIN, CONTENDS THAT THE TRIAL COURT'S FINDING OF PATERNITY WAS CONTRARY TO THE WEIGHT OF EVIDENCE AND THAT THE ALLOWING OF BLOOD WHICH WAS TAKEN IN A PRIOR PATERNITY CASE AND WHICH WAS USED ONE YEAR LATER IN THIS CASE; ALONG WITH THE QUESTIONABLE EXPERT, DR. CHARLES DEWITT'S TESTIMONY WHICH WAS BASED UPON A TEST THAT HE DID NOT CONDUCT AND A TEST IN WHICH THE ANTIGENS WERE MISIDENTIFIED; AND, THE TRIAL COURT'S EVIDENTIAL RULING ALLOWING THE FOREGOING (HEARSAY) EVIDENCE CONSTITUTED A REVERSIBLE ERROR.

#### ARGUMENT

IT IS OBVIOUS FROM DR. CHARLES DEWITT'S TESTIMONY AND IT IS OBVIOUS FROM THE EXHIBITS AND THE CONFLICTS THAT EXIST WITHIN THE EXHIBITS, THAT DR. CHARLES DEWITT DID NOT PERFORM THE TESTS, NOR DID HE OVERSEE THE TESTS. DR. CHARLES DEWITT WAS UNABLE TO EXPLAIN THE OBVIOUS DISCREPANCIES AS WAS SET FORTH IN

-----

HIS TWO CONFLICTING LETTERS (SEE EXHIBITS "11" AND "12"). IN FACT, DR. CHARLES DEWITT ATTEMPTED TO DISCLAIM THE LETTERS WHICH BORE HIS SIGNATURE AND HE WAS TOTALLY UNABLE TO EXPLAIN THE DISCREPANCIES BETWEEN THE TWO EXHIBITS, TO-WIT: EXHIBIT "11" CONCLUSIVELY SHOWS THAT EDWARD L. WOODS FELL WITHIN PHENOTYPE ANTIGEN B45; WHILE EXHIBIT "12" CONCLUSIVELY PUTS EDWARD L. WOODS IN PHENOTYPE ANTIGEN B44. THE ERRORS IN HIS LETTERS ARE DIRECTLY TRACEABLE TO THE DISCREPANCIES IN THE TESTS. THE DISCREPANCIES ARE FURTHER TRACEABLE TO THE VERY IMPORTANT FACTS AND FIGURES WHICH WERE LEFT OUT OF THE TESTS. FOR EXAMPLE, SEE THE INTENTIONAL DOUBLE-IDENTIFYING OF PHENOTYPE ANTIGEN (A2,A2). PLEASE NOTE THAT THE "A2" ANTIGEN IS IDENTIFIED TWICE IN THE MARY TURPIN TESTS AS SET FORTH IN EXHIBIT "5". THE COMPLETE CONFUSION OF DR. DEWITT'S LETTERS AND THE COMPLETE CONFUSION OF THE TESTS ALL INDICATE THAT EITHER DR. DEWITT OR THE PERSON WHO WAS DELEGATED THE TESTING WERE COMPLETELY CONFUSED. IN LIGHT OF THE CONFUSION AND IN LIGHT OF THE OBVIOUS CONFLICTS, IT IS SUBMITTED THAT DR. CHARLES DEWITT'S TESTIMONY SHOULD BE DISREGARDED; IN THAT THE DELEGATED JUDGMENTAL DUTIES WERE SUCH THAT THE COURT SHOULD NOT HAVE ADMITTED THE RESULTS AND DR. DEWITT'S TESTIMONY UNDER THE HEARSAY EXCEPTION RULE. IN FACT, DR. CHARLES DEWITT'S VAGUE INTERPRETATION OF THE TESTS SHOULD BE DISREGARDED.

SINCE THE RESULTS OF TESTING ARE DEPENDENT ON CHEMICAL REACTIONS OF PROTEINS WHICH ARE VERY COMPLEX AND WHICH

-----

REQUIRE GREAT SKILL AND JUDGMENT, THE TECHNICIAN WHO ADDS THE SERUM TO THE BLOOD, AND THE TECHNICIAN WHO DETERMINES ITS REACTION WITH THE ANTIGEN MUST BE ABLE TO ASCERTAIN THE PROTEIN REACTION WHICH IS DETERMINED BY THE MARKS ON THE CELLS. THIS REACTION IS NOT MEASURED INSTRUMENTALLY, BUT IS TO BE OBSERVED BY A SKILLED PATHOLOGIST AND DETERMINED ON A SCALE OF 1 TO 8, IN WHICH CATEGORY THE ANTIGEN FALLS. THEREFORE, THE RESULTS ARE JUDGMENT INTERPRETATIONS BY TECHNICIANS (AND NOT BY QUALIFIED PATHOLOGISTS), AND AS SUCH ARE OPEN TO HUMAN ERROR. FOR EXAMPLE, THE ABILITY TO JUDGE DIFFERENT COLORS, AND THE ABILITY TO ARRIVE AT DIFFERENT CONCLUSIONS BY DISTINGUISHING BETWEEN THE MARKINGS MAKES THE TESTS COMPLETELY JUDGMENTAL. SHOULD ONE PATHOLOGIST BE COLORBLIND OR EVEN SLIGHTLY COLORBLIND, THEN AND IN THAT EVENT TWO PATHOLOGISTS WOULD SEE THE SAME TEST DIFFERENTLY AND ARRIVE AT A DIFFERENT RESULT. UNDER THESE FACTS AND CIRCUMSTANCES, THE HLA TEST INCLUDES OPINIONS AND DIAGNOSES. THE TESTS CERTAINLY INCLUDE A CONTROVERSIAL MATTER. IN FACT, THE OPINIONS OR DIAGNOSES BARES ON THE CRUCIAL ISSUE IN THIS CASE.

AN OPINION OR DIAGNOSIS CONTAINED IN A BUSINESS RECORD IS EXCLUDABLE REGARDLESS OF ITS EXCEPTION FROM THE HEARSAY RULE, IF THE BUSINESS RECORD CONTAINS AN OPINION OR DIAGNOSIS, OR IF IT LACKS RELEVANCE. SEE THE FOLLOWING CASES: (COASTAL STATE GAS PRODUCING COMPANY V. LOCKER (TexCivAPP 1968) 436 S.W. 2D, 592; NOLAND V. MUTUAL OF OMAHA INSURANCE COMPANY (1973), 57

-----

WISCONSIN 2ND 663, 205 N.W. 2ND 388; ANTMID INCORPORATED V. FJELL-ORANJE LINES (SEVENTH CIRCUIT, 1972) 458 FED 2ND, 712; LOPER V. ANDREWS (TEXAS 1966) 44 S.W. 2ND, 300; MUCCI V. LEMONTE 157 CT 566, 254 A.2ND 879; AND, NOVAKOFSKI V. STATE FARM MUTUAL INSURANCE COMPANY, 34 WISCONSIN 2D 154, 148 N.W. 2ND 714.

### CONCLUSION

THIS CASE SHOULD BE REVERSED FOR THE FOLLOWING REASONS:

(A) DR. CHARLES DEWITT USED THE BLOOD TEST THAT WAS TAKEN IN A FOREIGN CASE TO-WIT, THE CASE OF BONNIE MILLER JOHNS V. EDWARD L. WOODS (SEE EXHIBIT 5). SAID BLOOD AND TEST HAVING BEEN TAKEN AND ANALYZED FOR APPROXIMATELY MORE THAN A YEAR PRIOR TO THE CONCEPTION AND BIRTH OF ANGELA A. TURPIN, THE CHILD WHOSE PATERNITY IS SOUGHT TO BE DETERMINED IN THIS CASE.

(B) PLAINTIFF FAILED TO ESTABLISH AN ADEQUATE FOUNDATION FOR THE ADMISSIBLE OF THE ADMISSIBILITY OF THE HLA TEST. THE LABORATORY TESTS ARE IN COMPLETE CONFUSION.

(C) THE LABORATORY TECHNICIAN, PAULA SIMENSON POGLAGEN, WHO DID THE BASIC WORK UP ON THE BLOOD SAMPLES FOR THE TEST WAS CLEARLY NOT QUALIFIED. SEE PHILLIPS V. JACKSON, UTAH SUPREME COURT NO. 15618, FILED 7/22/80. THERE WAS NO TESTIMONY BY THE PERSON WHO OBTAINED THE BLOOD NOR WAS THERE ANY PROOF OF THE CHAIN OF CUSTODY OF THE BLOOD SAMPLES. EDWARD L. WOODS WAS BLED

-----

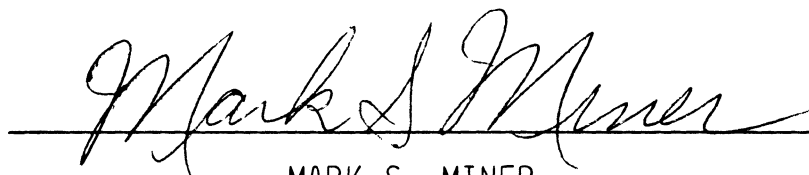
BY SOMEONE ON OCTOBER 20, 1983, IN THE CASE OF JOHNS V. WOODS. THE MOTHER AND CHILD IN THIS CASE WERE BLED ON JANUARY 27, 1984. DR. CHARLES DEWITT TESTIFIED THAT HE DETERMINED PATERNITY FROM TABLES THAT HE HAD PREPARED, WITHOUT ESTABLISHING ANY FOUNDATION FOR THE TABLES, AND WITHOUT ANY EVIDENCE WHATSOEVER TO SUPPORT THE TABLES. DR. CHARLES DEWITT DREW NO BLOOD, PERFORMED NO TEST, AND FAILED TO SUPERVISE ANY PORTION OF THE HLA LABORATORY TEST.

(D) DR. CHARLES DEWITT FAILED TO PRODUCE EVIDENCE OF HIS QUALIFICATIONS; OR, THAT HE PARTICIPATED IN THE TAKING OF THE BLOOD OR THE HLA TISSUE TYPING.

(E) THAT THE MOTHER OF THE CHILD, MARY A. TURPIN, SUFFERED FROM NUMEROUS VENEREAL DISEASES WHILE THE ACCUSED FATHER OF THE CHILD HAD NONE.

WHEREFORE, THE ABOVE ENTITLED CAUSE SHOULD BE REVERSED IN THAT THE TRIAL COURT'S FINDINGS ARE CONTRARY TO THE WEIGHT OF THE EVIDENCE; AND, THAT THE ADMISSION AND CONSIDERING OF THE HLA TEST ARE CONTRA TO THE LAW AND CONSTITUTES A REVERSIBLE ERROR.

RESPECTFULLY SUBMITTED,

A handwritten signature in cursive script, reading "Mark S. Miner", written over a horizontal line.

MARK S. MINER  
ATTORNEY FOR THE DEFENDANT



CERTIFICATE OF SERVICE

I HEREBY CERTIFY THAT I CAUSED TO BE DELIVERED FOUR  
(4) TRUE AND CORRECT COPIES OF THE FOREGOING APPELLANT'S BRIEF ON  
APPEAL TO THE FOLLOWING ON THIS 14<sup>th</sup> DAY OF MAY, 1986:

SANDY MOOY  
DEPUTY COUNTY ATTORNEY  
3195 SOUTH MAIN STREET  
P.O. Box 15450  
SALT LAKE CITY, UTAH 84115-0450

SAID BRIEF WAS DULY SERVED ACCORDING TO LAW BY UNITED  
STATES MAIL.

  
MARK S. MINER

T.L. "TED" CANNON,  
Salt Lake County Attorney  
By, Sandy Mooy,  
Deputy County Attorney  
3195 South Main Street  
P.O. Box 15450  
Salt Lake City, Utah 84115-0450  
Telephone: 483-6333

---

IN THE DISTRICT COURT OF THE THIRD JUDICIAL DISTRICT,  
IN AND FOR SALT LAKE COUNTY, STATE OF UTAH

---

THE STATE OF UTAH, BY AND	)	
THROUGH UTAH STATE DEPARTMENT	)	
OF SOCIAL SERVICES,	)	JUDGMENT, ORDER AND DECREE
Plaintiff,	)	
Vs.	)	Civil No. C 83 6237
EDWARD L. WOODS,	)	
Defendant.	)	

---

This matter came on for hearing before the Honorable J. Dennis Frederick the 12th day of April, 1985. The State of Utah appeared through counsel, Sandy Mooy, the Defendant, Edward L. Woods, appeared in person and through counsel of record, Mark Miner. Based upon the trial being had and based upon the testimony, the evidence received by the Court, it is hereby

ORDERED, ADJUDGED AND DECREED AS FOLLOWS:

1. The Defendant, Edward L. Woods, is the natural father of Angela A. Turpin, born the 22nd day of July, 1983, to Mary A. Turpin.

2. The issues of child support arrearages and reimbursement

Judgment, Order and Decree  
C 83 6237  
Page 2

of medical expenses are reserved for determination at a later date.

DATED this 25 day of June, 1985

ATTEST  
H. DIXON HINDLEY  
Clark

J. DENNIS FREDERICK, JUDGE

By [Signature] Deputy Clerk

I hereby certify that I mailed a copy of the foregoing Judgment, Order and Decree to Mark S. Miner, Attorney for Defendant, at 525 Newhouse Building, 10 Exchange Place, Salt Lake City, Utah 84111 this 13th day of June, 1985.

STATE OF UTAH ) 96  
COUNTY OF SALT LAKE )  
I, H. DIXON HINDLEY, CLERK OF THE DISTRICT  
COURT OF SALT LAKE COUNTY, UTAH, DO HEREBY  
CERTIFY THAT THE FOREGOING IS  
A TRUE AND FULL COPY OF THE  
ORIGINAL FILED IN MY OFFICE.  
WITNESS MY HAND AND SEAL OF OFFICE  
THIS 10 DAY OF December 19 85  
H. DIXON HINDLEY, CLERK  
BY [Signature] DEPUTY

JUDGMENT

FILED  
FILED IN CLERK'S OFFICE  
Salt Lake County Utah

T.L. "TED" CANNON  
SALT LAKE COUNTY ATTORNEY  
BY: SANDY MOOY  
Deputy County Attorney  
3195 South Main Street  
Salt Lake City, Utah 84115  
Telephone: 483-6333

NOV 12 1985  
Honorable Judge Clerk 3rd Dist Court  
Deputy Clerk

IN THE DISTRICT COURT OF THE THIRD JUDICIAL DISTRICT  
IN AND FOR SALT LAKE COUNTY, STATE OF UTAH

STATE OF UTAH, BY AND THROUGH )	
UTAH STATE DEPARTMENT OF )	
SOCIAL SERVICES, )	JUDGMENT AND ORDER
Plaintiff, )	
vs. )	Civil No. C 83 6237
EDWARD L. WOODS, )	Bk 201 No. 3799
Defendant. )	11-13-85-812 am

This matter came on for hearing before the Honorable Judge Dennis Frederick the 1st day of October, 1985. The State of Utah appeared through counsel, Sandy Mooy, Deputy County Attorney, the Defendant, Edward Wood, failed to appear in person, however his counsel of record appearing, Mark Miner. Based upon the stipulation of the parties, and evidence received by the Court, it is hereby

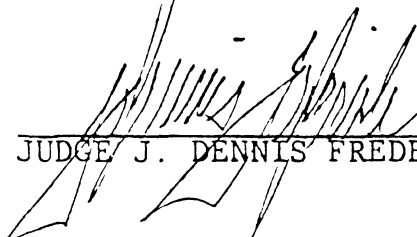
ORDERED, ADJUDGED and DECREED as follows:

1. Judgment is entered against the Defendant, Edward L. Woods in favor of the State of Utah, in the sum of \$1,480.00 representing reimbursement for reasonable medical expenses incurred by the State of Utah relative to the pregnancy and birth.
2. The Court orders that the Defendant Edward L. Woods is liable for child support arrearages from the date of birth of the

minor child through the time of this hearing and is also liable for ongoing child support payments for the support of the minor child. However, based upon the information and evidence available to the Court at this time, the Court is unable to enter a specific sum for such child support arrearages or ongoing support due to the Defendant's mental condition and his unemployed status during the time which the arrearages accrued and the current date.

DATED this 17 day of ~~October~~<sup>Nov.</sup>, 1985.

BY THE COURT:

  
\_\_\_\_\_  
JUDGE J. DENNIS FREDERICK

APPROVED AS TO FORM:

\_\_\_\_\_  
Mark Miner  
Attorney for Defendant

**ATTEST**  
**H. DIXON HINDLEY**  
Clerk

By

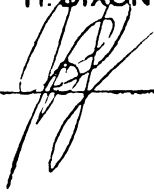
  
\_\_\_\_\_  
Deputy Clerk

EXHIBIT "C"

MARK S. MINER  
Attorney for the Defendant  
525 Newhouse Building  
10 Exchange Place  
Salt Lake City, Utah 84111  
Phone 363-1449  
Utah State Bar No. A2273

FILE  
CLERK  
TAH

MAY 6 4 08 PM '85

H. D. CLERK  
BY *Margaret Smith* CLERK

FILMED

IN THE THIRD JUDICIAL DISTRICT COURT OF SALT LAKE COUNTY

STATE OF UTAH

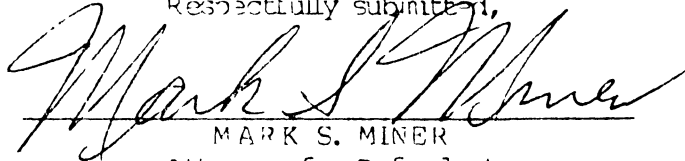
STATE OF UTAH, BY AND	)	
THROUGH UTAH STATE	)	
DEPARTMENT OF SOCIAL	)	NOTICE OF INTENT TO APPEAL
SERVICES,	)	THE ISSUE OF PATERNITY AS
Plaintiff,	)	PERMITTED BY RULE 72A
	)	
vs.	)	
	)	
EDWARD L. WOODS,	)	
	)	
Defendant.	)	Civil No. C-83-6237
	)	Judge Dennis Frederick

COMES NOW the Defendant and gives notice to the Plaintiff and all of them, that Edward L. Woods preserves his right to appeal the issue of paternity until a final determination of all other claims have been adjudicated by the Court.

We preserve the right to appeal all of Dr. Dewitt's testimony and all of the supporting evidence that was introduced concerning paternity under the hearsay rule and other rules. Said evidence being considered and directly contra to the Utah Supreme Court decision in the case of Deborah J. Phillips and Utah State Department of Social Services v. Jeffrey Walker Jackson, Supreme Court file No. 15618.

DATED this 4th day of May, 1985.

Respectfully submitted,

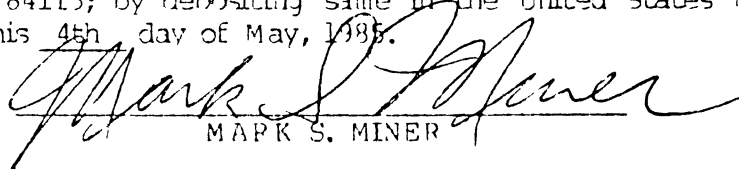


MARK S. MINER

Attorney for Defendant

CERTIFICATION OF MAILING

I hereby certify that I mailed a true and correct copy of the foregoing NOTICE OF INTENT TO APPEAL THE ISSUE OF PATERNITY AS PERMITTED BY RULE 72A to Sandy Mooy, Deputy County Attorney, 3195 South Main, Salt Lake City, Utah 84115; by depositing same in the United States Mail at Salt Lake City, Utah this 4th day of May, 1985.



MARK S. MINER

LE (✓ PARTIES PRESENT)

COUNSEL: (✓ COUNSEL PRESENT)

State of Utah

Sandy Mooney

- vs -

Edward L Woods ✓

Mark Miner ✓

S. Bly

CLERK

S. Hellberg

REPORTER

H. Bell

BALFF

HON.

S. Dennis Frederick

JUDGE

DATE:

4-12-85

This case comes now on before the Court  
 & trial. Appearances as shown

Charles D. Witt is sworn and examined  
 behalf of the plaintiff. The state  
 then to before the is argued to the Court  
 & Court being fully advised in the premises  
 on the motion. Mary Carlson is sworn  
 & examined in behalf of the state. The  
 state rests

The defendant's motion to dismiss is  
 read and submitted to the Court. The Court being  
 advised in the premises denies the motion.  
 Edward L Woods and Ralph Woods are  
 sworn and examined in behalf of the defendant.  
 defendant rests.

The case is argued to the Court and submitted.  
 & Court being fully advised in the premises,  
 is Edward L Woods is the biological father and  
 raises the issue of amount owing for further trial.



FILE NO. C-83-6237

FILE: (✓ PARTIES PRESENT)

COUNSEL: (✓ COUNSEL PRESENT)

State of Utah

Sandy Moay ✓

- vs -

Edward L Woods (NP)

Mark Miner ✓

S. J. Sly

CLERK

S. Holberg

REPORTER

H. Bell

BAILIFF

HON. S. Dennis Frederick

JUDGE

DATE: Oct. 1, 1985

This case comes now on before the Court for a nuncupatory hearing. Appearances as shown.

Eloget LeRoy Dunn and Mary Carlsson are sworn and examined in behalf of the plaintiff. Plaintiff rests. Both sides rest.

The case is argued to the Court and submitted. The Court being fully advised in the premises rules the defendant is responsible for normal delivery charges, the child support arrearage and on going support. Based on stipulation of counsel Court rules the delivery expenses were \$1,480.00.

MARK S. MINER  
Attorney for the Defendant and Appellant.  
525 Newhouse Building  
10 Exchange Place  
Salt Lake City, Utah 84111  
Phone 363-1449  
BAR LICENSE A2273

---

IN THE THIRD JUDICIAL DISTRICT COURT OF SALT LAKE COUNTY  
STATE OF UTAH

---

STATE OF UTAH, BY AND	)	AMENDED
THROUGH UTAH STATE	)	NOTICE OF APPEAL
DEPARTMENT OF SOCIAL	)	TO UTAH SUPREME COURT
SERVICES, and MARY TURPIN,	)	
	)	
Plaintiffs,	)	
	)	
vs.	)	
	)	
EDWARD L. WOODS,	)	
	)	
Defendant.	)	CIVIL NO. C83-6237
	)	

---

NOTICE IS HEREBY GIVEN that Edward L. Woods, the above named defendant, hereby appeals to the Supreme Court of the State of Utah, from the JUDGMENT and ORDER signed and entered in this action on November 12, 1985, by the Honorable Judge J. Dennis Frederick. Appeal is further taken from the intermittent Judgment, Order, and Decree that was rendered from the hearing on the 12th day of April, 1985; signed by the Honorable J. Dennis Frederick, District Judge, on the 25th day of June, 1985. This appeal is taken on the law and the facts set forth in the FINDINGS OF FACT and CONCLUSIONS OF LAW and INTERMITTENT JUDGMENT and on the Law and the Facts set forth in the FINDINGS OF FACT and CONCLUSIONS OF LAW in the FINAL ORDER AND the FINAL JUDGMENT. Said cause is appealed in its entirety.

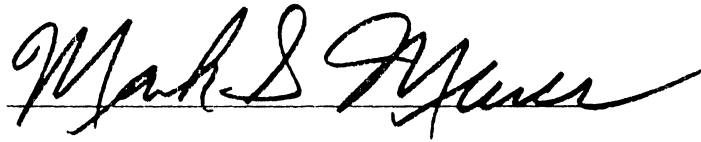
Respectfully submitted

  
MARK S. MINER

Attorney for the Defendant Edward L. Woods.

CERTIFICATE OF MAILING

I hereby certify that I duly served the foregoing AMENDED NOTICE OF APPEAL on T.L. Cannon (Ted Cannon), Salt Lake County Attorney; and, Sandy Mooy, Deputy County Attorney, by mailing a true and correct copy of the foregoing AMENDED NOTICE OF APPEAL to said attorneys at their office 3195 South Main Street, Salt Lake City, Utah 84115 on this 6th day of December, 1985, and that said Amended Notice of Appeal was duly served according to law.

A handwritten signature in black ink, reading "Mark S. Miner", written over a horizontal line.

MARK S. MINER  
Attorney for the Defendant Edward L. Woods.  
525 Newhouse Building  
10 Exchange Place  
Salt Lake City, Utah 84111  
Phone 363-1449

MARK S. MINER  
Attorney for the Defendant and Appellant.  
525 Newhouse Building  
10 Exchange Place  
Salt Lake City, Utah 84111  
Phone 363-1449

---

IN THE THIRD JUDICIAL DISTRICT COURT OF SALT LAKE COUNTY  
STATE OF UTAH

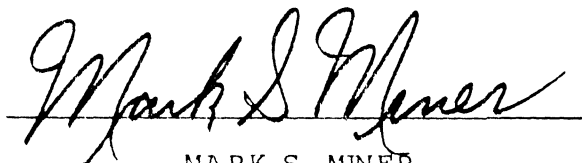
---

STATE OF UTAH, BY AND	)	
THROUGH UTAH STATE	)	NOTICE OF APPEAL
DEPARTMENT OF SOCIAL	)	TO UTAH SUPREME COURT
SERVICES, and MARY TURPIN,	)	
	)	
Plaintiffs,	)	
	)	
vs.	)	
	)	
EDWARD L. WOODS,	)	
	)	
Defendant.	)	CIVIL NO. C83-6237
	)	

---

NOTICE IS HEREBY GIVEN that Edward L. Woods, the above named defendant, hereby appeals to the Supreme Court of the State of Utah, from the JUDGMENT and ORDER signed and entered in this action on November 12, 1985, by the Honorable Judge J. Dennis Frederick. This appeal is taken on the law and the facts and on the JUDGMENT and ORDER in its entirety.

Respectfully submitted,



MARK S. MINER  
Attorney for the Defendant Edward L. Woods.  
525 Newhouse Building  
10 Exchange Place  
Salt Lake City, Utah 84111  
Phone 363-1449

### CERTIFICATE OF MAILING

I hereby certify that I duly served the foregoing NOTICE OF APPEAL on T.L. Cannon (Ted Cannon), Salt Lake County Attorney; and, Sandy Mooy, Deputy County Attorney, by mailing a true and correct copy of the foregoing NOTICE OF APPEAL to said attorneys at their office 3195 South Main Street, Salt Lake City, Utah 84115 on this 6th day of December, 1985 and that said Notice of Appeal was duly served according to law.

A handwritten signature in black ink, reading "Mark S. Miner", written over a horizontal line.

MARK S. MINER  
Attorney for the Defendant Edward L. Woods.  
525 Newhouse Building  
10 Exchange Place  
Salt Lake City, Utah 84111  
Phone 363-1449

## IN THE SUPREME COURT OF THE STATE OF UTAH

Deborah J. Phillips and State  
of Utah, by and through Utah  
State Department of Social  
Services,  
Plaintiffs and Respondents,

No. 15618

FILED  
July 22, 1980

v.

Jeffrey Walker Jackson,  
Defendant and Appellant.

Geoffrey J. Butler, Clerk

STEWART, Justice:

Plaintiffs initiated this lawsuit to establish defendant's paternity of a child born out of wedlock to plaintiff Phillips and to compel defendant to support the child. The case was tried to a court sitting without a jury. The court found the defendant to be the father and ordered support payments to be paid. The central issue on this appeal is whether the trial court erred in admitting the results of a relatively new scientific test known as the HLA (Human Leucocyte Antigen) test which purportedly proved the defendant to be the father of the child in this case to a 97% degree of probability. Defendant in addition contends that the trial court's finding of paternity was contrary to the weight of the evidence and that the cumulative effect of the trial court's evidentiary rulings constituted reversible error.

We reverse and remand for further proceedings because it was prejudicial error for the trial court to admit the HLA test results without a proper foundation as to the reliability of both HLA tests in general and the particular test in this case.

The testimony of plaintiff Phillips at trial was self-contradictory and also controverted by defendant. Phillips testified that she and the defendant had had sexual intercourse with one another three to four times a week from the middle of January 1975 to March 15, 1975. She first testified that she had not had intercourse with anyone else during that period, but later admitted having had sexual relations with another man about January 15. Her child was born full term October 11, 1975. Phillips testified that she disclosed her pregnancy to the defendant in February 1975 and that she telephoned him on Thanksgiving Day of the same year to inform him of the birth. On both occasions, she claimed, he made admissions to her concerning his paternity. At trial defendant denied paternity and testified that he had not engaged in sexual intercourse with the plaintiff Phillips at any time. He also testified that Phillips had not informed him of her pregnancy until after the child was born when she telephoned him on Thanksgiving.

Prior to trial plaintiff Phillips, the child, and defendant had blood samples taken and submitted to an HLA tissue-typing test.<sup>1</sup> The test indicated that the defendant was the father of the child in question.

As we understand the HLA test, it is based on the identification and typing of antigen markers found in white blood cells and other tissues of the body. In recent years a number of different tests or systems--by one account as many as fifty--have been developed to resolve questions of disputed parentage. Wiener and Socha, *Methods Available For Solving Medico-Legal Problems of Disputed Parentage*, 21 J. For. Sci. 12, 61 (1975). The tissue-typing test is a genetic test based upon the chromosomal makeup of the test subject. Human body cells have 23 pairs of chromosomes which carry genetic markers called HLA antigens. An antigen is a substance which can stimulate antibody production when introduced into another individual. Antigens, which are produced under genetic control by genes, have been scientifically identified and classified. The basic theory is that by identifying the antigen markers of a child and of the mother, the child's antigen genetic markers which could only be inherited from the father can generally be determined, thereby identifying the father to a high degree of certainty.<sup>2</sup> This is so because, it is claimed, most people are "rare" types in the sense that only about one out of a thousand people have a similar HLA type. Therefore, a rare type that occurs in a putative father and that also occurs in a child produces a high degree of probability that the putative father is in fact the father. See Terasaki, *Resolution by HLA Testing of 1000 Paternity Cases Not Excluded by ABO Testing*, 16 J. Fam. L. 543, 511-15 (1977-78).

1. The trial court's findings of fact indicate the parties voluntarily submitted to the blood tests. There is no court order or stipulation of the parties regarding blood testing in the record. Appellant claims that counsel agreed only to the performance of the HLA test, not to the admissibility of its results. In passing we note that the trial court has authority pursuant to para. 78-45a-7 to order blood tests of "the mother, child and alleged father . . ." in a paternity action and that a refusal to submit to such a test may be used as a basis for resolving the question of paternity against a party. The court may also order blood tests pursuant to para. 78-25-18. It should be noted, however that the Uniform Act on Paternity, which constitutes Chapter 45a of Title 78, does not specify what types of blood tests may be ordered or are admissible in evidence.
2. See, *Current Status of Paternity Testing*, 9 Fam. L. Q. 615, 621 (1975). See also Joint AMA-ABA Guidelines, *Present Status of Serologic Testing in Problems of Disputed Parentage*, 10 Fam. L. Q. 217-272-78 (1976), for an explanation of HLA blood typing.

In the instant case, plaintiffs called two witnesses to establish the admissibility of the HLA test. Paula Simenson, a medical technologist with a B.S. degree in bacteriology, a chemistry minor, and 2 1/2 years' work experience, testified that she had witnessed the taking of the blood sample from the defendant. She traced the chain of custody of the blood sample. Over defendant's objection to the admissibility of the test evidence, she also explained how the test works and described the testing procedure in this particular case. Ms. Simenson conducted the laboratory work for the HLA test and prepared a work sheet which represented her findings. The work sheet was admitted into evidence over defendant's objection.

Plaintiff's second witness, Dr. Charles DeWitt, a pathologist, based his opinion as to the paternity of the father on the work sheet and on tables of percentages published by another person. Dr. DeWitt testified that the test has been used for approximately 15 years for "medical purposes." He did not specify for which medical purposes although it appears that the use referred to by Dr. DeWitt was primarily for determination of tissue compatibility in organ transplantation procedures. Dr. DeWitt also testified without elaboration that the HLA test, when performed under certain conditions, is highly accurate and widely accepted.

Dr. DeWitt stated that the statistical probability that a particular man could be correctly identified as the father of a child ranged from 70% to over 90%, depending on the number of men with whom the mother had sexual intercourse at the time of ovulation. That is, assuming the mother had had sexual intercourse with 15 different men near the time of her ovulation, there would be a 70% likelihood that a person identified as the father was in fact the father. If the mother had had sexual intercourse with only two men during the same period of time, there would be a 97% likelihood that the man identified as the father by the test was in fact the father. Dr. DeWitt was not able to recall the title of the publication from which he obtained these percentages, nor did he give any information as to how widely accepted the tables were for determining paternity, what limitations or variables the tables were subject to, or the extent or nature of verification studies that had been done with respect to the tables. Although he stated that the "literature [was] full of reports" regarding the HLA test, he did not refer to any specific authority for his statements regarding the reliability of the HLA test or its alleged widespread use for determining parentage. Nor does it appear that he himself had done any research in developing the test or compiling and verifying the tables showing probabilities of parentage.

Dr. DeWitt concluded that the HLA blood test in the instant case did not exclude the defendant as the father, and that, based on calculated statistical probabilities taken from tables published in a book, there was a 97% degree of probability that defendant was in fact the father of plaintiff's child.

HLA tissue typing is a comparatively new form of test insofar as its use in the courtroom is concerned, and according to our research, its admissibility has been dealt with by only a few appellate courts. In *Cramer v. Morrison*, 88 Cal App 3d 873, 153 Cal Rptr 865 (1979), a California court of appeals reversed a trial court's refusal to admit the results of HLA testing in a paternity action. The trial court had ruled (1) that California statutory law allowed only evidence of an alleged father's nonpaternity and not evidence affirmatively showing paternity, and (2) that statistical evidence of this nature would have a prejudicial effect on the jury which would outweigh its probative value. In an evidentiary hearing before the trial judge, evidence was adduced that the HLA test indicated a 98.3% degree of probability that the defendant was the father. The trial court found that available data indicated the test was reliable but nevertheless held the test inadmissible for the reasons stated.

The court of appeals held that California law did not require "that the admissibility of scientific test evidence must be predicated on a 100 percent degree of accuracy" (153 Cal Rptr at 872). The court also held that California statutory law did not prohibit the admission of a California statutory law did not prohibit the admission of a test affirmatively tending to prove paternity. That law is based in part on the Uniform Act on Blood Tests to Determine Paternity which provides for the admission of tests such as the Landsteiner classification of red blood cell groups into evidence to exclude paternity. The Uniform Act also permits the admission of such tests, in the discretion of the trial court, to prove probability of paternity. However, in adopting the Uniform Act, California refused to adopt the latter provision. The court of appeals in *Cramer* held that the omission of the latter provision did not indicate a legislative intent to bar the admissibility of all tests which affirmatively identify a father. The court also noted that at the time the California Legislature adopted the Uniform Act the HLA test was not in use for paternity testing.

Finally, the court of appeals declined to address the issue as to whether the test had received general acceptance in the scientific community and therefore met the foundational requirements for admissibility. Accordingly, the court remanded for a determination of that issue. The court stated that the issue, being one of mixed fact and law, should be determined by the trial court on the basis of expert testimony, legal and scientific publications, and judicial opinions.

We found only two lower appellate court cases which have held that HLA tests are admissible. The Superior Court of New Jersey in *Malvasi v. Malvasi*, 167 N.J. Super 513 (1979), held that the HLA test had received general scientific acceptance and could be used along with other evidence to determine parentage. *Commissioner of Social Services v. Lardio*, 100 Misc 2d 220, 117 N.Y. Supp 2d 665 (1979), also held the test admissible.

The Wisconsin court of appeals in *J.B. v. A.F.*, 92 Wis.2d 696, 285 N.W.2d 880 (1979), refused to admit the results of an HLA tissue-typing test because of Wisconsin's highly restrictive statutory approach to the use of medical evidence in paternity disputes. The court, however, suggested that a review of the limiting nature of its statute might be in order in light of "medical advances and changed social conditions." In *Simons v. Jorg*, Fla., 375 So.2d 288 (1979), the court refused to admit the test on grounds no having to do with its reliability, and the court did not address that issue.

In sum, no state court of last resort has held that the HLA test meets all the necessary foundational requirements for admission in evidence.

In this case, the threshold issue is whether the test is inadmissible under the Uniform Act on Paternity, adopted in Utah as paragraphs 78-45a-1 et seq. This Act expressly authorizes the use of blood tests for the purpose of excluding paternity. Section 78-45a-10 of the Act states that "[i]f the court finds that the conclusions of all experts, as disclosed by the evidence based on the tests, are that the alleged father is not the father of the child, the question of paternity shall be resolved accordingly."

Under this statute blood tests may also be used to show a probability of paternity. The above-cited section provides further: "If the experts conclude that the blood tests show the possibility of the alleged father's paternity, admission of this evidence is within the discretion of the court, depending on the infrequency of the blood type."

There are two reasons why the Utah Act constitutes no bar to the admissibility of HLA tests if they otherwise meet the appropriate criteria for establishing reliability. First, the statute was enacted with reference to blood tests based on red blood cell groupings and was not intended to apply to HLA tests, which are of a different nature. *Cramer v. Morrison*, supra. HLA tests are not necessarily properly characterized as blood tests. Antigens may be found in most tissues of the body, including the liver and the kidneys, as well as component parts of the blood. *J.B. v. A.E.*, supra, 225 N.W.2d at 882. Second, even if the statute is deemed applicable, admissibility is left in the discretion of the court. Since red blood cell group tests produce relatively lower probabilities in affirmatively identifying paternity than the probabilities claimed for HLA tests, the latter, if otherwise admissible, should also be admissible. We conclude that para. 78-45(a)-10 does not preclude the admissibility of HLA tests if they otherwise meet the relevant legal standards for the admission of scientific evidence.

We turn next to the issue of the legal standards which determine the admissibility of scientific evidence. The most widely used standard for making that determination was formulated in *Frye v. United States*, 293 F. 1013 (D.C. Cir. 1923). The Frye test has been adopted by a majority of those jurisdictions in this country which have established standards to be applied in admitting scientific evidence which is new to the courtroom.<sup>3</sup> Frye held that scientific tests still in the experimental stages should not be admitted in evidence, but that scientific testimony deduced from a "well-recognized scientific principle or discovery" is admissible if the scientific principle from which the deduction is made is "sufficiently established to have gained general acceptance in the particular field in which it belongs." (293 F. at 1014.)

General acceptance in the scientific community, or more specifically the particular discipline or disciplines of the scientific community which deal with the principles involved, assures the validity of the basic principle, Verification of the basic principle and its application through widespread replication and practical usage is an appropriate indicium of reliability. *People v. Kelly*, 129 Cal.Rptr. 141, 549 P.2d 1240 (1976). The Frye standard, however, does not demand infallibility as a condition to admitting scientific evidence. *United States v. Franks*, 511 F.2d 25 (6th Cir. 1975); *United States v. Stifel*, 433 F.2d 431 (6th Cir. 1970); *United States v. Alexander*, 526 F.2d 161 (8th Cir. 1975).

Although a computation of probabilities not based on scientifically established data is inadmissible, *People v. Collins*, 68 Cal.2d 319, 66 Cal.Rptr. 497, 436 P.2d 33 (1968), it generally is the case that "[t]here is a probability factor in even the most carefully structured scientific inquiry; seldom is it possible to exclude all possible chance for error in human endeavor. But there is no requirement in our law that the admissibility of scientific test evidence must be predicated on a 100 percent degree of accuracy." *People v. Slone*, 76 Cal.App.3d 611, 625, 143 Cal.Rptr. 61, 70 (1978). Indeed, nonscientific evidence often falls far short of such accuracy, especially in the area of paternity identification.

The courts in admitting new scientific evidence have frequently relied on the practical application of a principle in a given discipline or area of endeavor as a sufficient indication of reliability. The widespread use of x-rays and radar prior to their judicial acceptance was an important factor in achieving test acceptance. *Strong*, Questions Affecting the Admissibility of Scientific Evidence 1970 U. of Ill. L.F. 1, 12. However, the rule requiring general acceptance should not be too restrictively applied. "[N]either newness nor lack of absolute certainty in a test suffices to render it inadmissible in court. Every useful new development must have its first day in court." *United States v. Stifel*, supra, at 438.<sup>4</sup>

3. Comment, The Psychologist as Expert Witness: Science in the Courtroom, 38 Md. L. Rev. 559, 557-78 (1979).

4. In *United States v. Franks*, the court stated:

Though *United States v. Stifel*, 433 F.2d 431, 438, 441 (6th Cir. 1970), cert. denied, 401 U.S. 994, 91 S.Ct. 1232 (1971), applied the *Frye v. United States*, 54 App.D.C. 46, 293 F. 1013 (1923), standard governing admissibility of scientific evidence as [to] whether the scientific process has gained "general acceptance in the particular field in which it belongs," we deem general acceptance as being nearly synonymous with reliability. If a scientific process is reliable, or sufficiently accurate, courts may also deem it "generally accepted." Accord, *United States v. Brown*, 13 Crim.L.Rep. 2203, 2204 (D.C.Super.Ct. May 1, 1973. [511 F.2d at 33, n.12.]



## SUPREME COURT DECISIONS

Moreover, admissibility is not governed solely by the general acceptance test, although a showing of general acceptance would generally be sufficient. The Frye test has been criticized as being overly rigorous, and some jurisdictions have held that a conflict in expert opinion affects weight rather than admissibility,<sup>5</sup> and consequently have modified the rule.

Various legal scholars have proposed other foundational standards by which to determine admissibility of new scientific evidence.<sup>6</sup> The paramount concern is, of course, whether the evidence is sufficiently reliable. Different types of scientific evidence may pose varying and sometimes difficult problems for the integrity of the fact finding process, but in an age when one scientific advancement tumbles in rapid succession upon another and may be known only among a limited circle of scientists, we are not inclined to adopt a standard that would deprive the judicial process of relevant scientific evidence simply because it is of recent vintage or because knowledge of the principles, or the process for applying a principle, is limited to a small but highly specialized group of experts. Tests that have passed from the experimental stage may be admissible if their reliability is reasonably demonstrable.<sup>3</sup> Jones on Evidence para. 15.9 (6th ed. 1972).

An analysis of the admissibility of scientific evidence, while taking into account general scientific acceptance and widespread practical application, must focus in all events on proof of inherent reliability. A scientific test designed specifically for the purpose of a lawsuit may pass muster with sufficient proof of reliability and an adequate explanation of the pertinent variables and potential inaccuracies so that a trier of fact may make a rational appraisal.<sup>7</sup> We do not intend, however, that a courtroom should be a forum for scientific experimentation. Adjudication means fact finding, and while speculation is not legitimate in that process, a trier of fact should not be deprived of scientific data because some controversy attaches to it. Management of doubt is a major aspect of our rules of procedure and evidence, and that which reasonably leads to resolution of doubt and ascertainment of truth should be admissible.

In this light it is appropriate in determining reliability to give some consideration to the nature and the reliability of the evidence that must be relied upon in the absence of the scientific evidence. In any event, when the underlying scientific principle and the means for applying that principle to resolution of legal issues, have received widespread acceptance, there will usually be no reason to reject the test.

In the instant case the following elements must be addressed to provide a sufficient foundation for the admissibility of HLA tests: (1) the correctness of the genetic principles underlying the test for determining paternity, (2) the accuracy and reliability of the methods utilized in application of the principle to determine paternity, (3) the effect of variables such as occur in persons of different nationalities or ethnic origins that would influence the accuracy of the test, (4) other factors that might tend to invalidate the test or significantly change the probability of accuracy, (5) establishing that the actual method employed and the particular test used in a given case were performed in accordance with proper procedures and with proper material and equipment, and (6) the qualifications of the necessary witnesses.<sup>8</sup>

We recognize that it has been asserted in some literature that the test is highly accurate when performed under the right conditions<sup>9</sup> and is widely accepted,<sup>10</sup> even though it is of recent vintage at least in this country.<sup>11</sup> A number of articles in medical and legal periodicals assert that the HLA test is an improved and reliable method for determining paternity. Joint AMA-ABA Guidelines: Present Status of Serologic Testing in Problems of Disputed Parentage, 10 Fam. L. Q. 247 (1976); Polesky & Krause, Blood Typing in Disputed Paternity Cases: Capabilities of American Laboratories, 10 Fam. L. Q. 287 (1976); Periaaki, Resolution by HLA Testing of 1000 Paternity Cases Not Excluded by ABO Testing, 16 J. Fam. L. 513 (1978).

5. United States v. Baller, 519 F.2d 463 (4th Cir. 1975) stated:

Unless an exaggerated popular opinion of the accuracy of a particular technique makes its use prejudicial or likely to mislead the jury, it is better to admit relevant scientific evidence in the same manner as other expert testimony and allow its weight to be attacked by cross examination and refutation. 519 F.2d at 466-67.

6. Boyce, Judicial Recognition of Scientific Evidence in Criminal Cases, 8 Utah L. Rev. 313 (1962-64); Latin, Tinnhill and White, Remote Sensing, Evidence and Environmental Law, 64 Cal. L. Rev. 1300 (1976); Strong, Questions Affecting the Admissibility of Scientific Evidence, 1970 U. of Ill. L. F. 1; McCormick, Law of Evidence, para. 203 (1972).

7. An illustration of the need for flexibility is *Coppolino v. State*, 111 App. 223 S.2d 68 (cert. denied 399 U.S. 927) (1970), in which was developed specifically for that trial and its results were admitted in evidence. Obviously, in this case general acceptance in the scientific community was impossible.

8. Published articles and books may also be used as evidence supporting points (1) and (2) above.

9. The accuracy of the HLA test is clearly dependent on, among other things, the quality of the reagents used in a given test and the sophistication of the laboratory involved. Weiner and Socher, Methods Available for Solving Medical Legal Problems of Disputed Parentage, 21 J. For. Sci. 42-61 (1975) in discussing the claims that HLA testing can exclude the chance of parentage to a 99% certainty stated the following:

It would seem from these considerations that the virtual solution of problems of disputed parentage is now at hand. Unfortunately, this solution is beset with numerous pitfalls, and few laboratories, if any, are equipped to carry out all the necessary tests. The performance of all the tests mentioned in this report would be a laborious task and too costly in time and material for routine use. Furthermore, the HLA tests are reputed to have a reproducibility of only about 10%, so that the possibility of errors is a real one indeed.

10. In fact there may be some question as to the extent of the use of the HLA test. In a survey of representative American laboratories conducted in 1974, only 16% of the American Association of Blood Banks (AABB) member laboratories had the capacity for HLA typing and only 2% of the non-AABB laboratories had the capacity for the HLA typing. *Id.* at 156-158.

Although these articles are helpful in ascertaining the extent to which the HLA test, or that test in conjunction with others, is demonstrably reliable and has achieved acceptance in the scientific community for paternity identification, the articles are not sufficient, absent expert testimony, for this Court to determine as a matter of law the issue of general admissibility, especially in view of the paucity of legal opinions on this point. The articles require expert interpretation and elaboration. It is not clear, for example, that they all define the HLA test in the same manner, or require that the same procedures be followed to achieve the degree of reliability claimed. Nor is it clear what other tests, if any, should be used in conjunction with the HLA test to achieve the highest degree of accuracy. In short, there are numerous unanswered questions which should be addressed by expert testimony to lay the necessary foundation, if indeed it can be laid.

In this case the plaintiff failed to establish an adequate foundation at trial for the admissibility of the HLA tests. This conclusion is required for several reasons. First, the laboratory technician who did the basic workup on the blood samples for the test was clearly not qualified to testify with respect to the basic validity of the test. Her testimony indicated that most of her work with HLA tissue typing was used in connection with organ transplantation. It is not possible to discern from the record whether the reliability claimed for HLA tests in determining tissue compatibility in organ transplants is transferable to paternity identification. She did, however, testify to the necessary chain of custody of the blood samples and the actual use of the blood samples in performing the test.

Dr. DeWitt, a pathologist, was relied on to establish the necessary scientific foundation. Counsel stipulated that he is an expert, a practice wholly appropriate in many cases, but one that leaves this record devoid of evidence of his qualifications--evidence that is essential in this particular case. In a case dealing with the proposed admissibility of a new scientific test which presumably will be relied on innumerable times in the future, the stipulation leaves a hiatus in the necessary foundation.

Furthermore, his testimony does not supply the necessary information as to the general acceptance of the test, the existence of verification studies, if any, and the particular tests that were in fact performed in this case. There is no evidence in the record which establishes his expertise either in the theory or in the use of HLA testing for paternity purposes. In addition, there is no evidence indicating whether special training in pathology or some other field is a necessary prerequisite to qualify a witness to testify concerning the test.

Dr. DeWitt did state that the test is highly accurate and has been in use for some fifteen years, and that "the figures that we used to deduce the possibilities are based on the analysis of a large number of families." He further testified that the test was widely used "for medical purposes." The difficulty with this testimony is that it is too general, too vague, and too unrelated to the specific requirements for establishing a foundation for the test as a means for determining reliability. Since his testimony did not focus specifically on paternity identification, it may and, as best as can be determined from the record, in fact does refer to other medical uses such as tissue compatibility for purposes of organ transplantation. Furthermore, Dr. DeWitt did not indicate how the table of percentages used to establish paternity probabilities was arrived at, although he did testify generally that the probabilities "were widely accepted" and "supported by similar work elsewhere done in public by other people." But he did not explain what he meant by "widely accepted," or by whom, and he did not supply any detail as to the work done by others. Nor does it appear that he had particular knowledge obtained from a technical background and training in the area, or from familiarity with the scientific literature on the subject. The general statement that the method is used widely and has wide scientific acceptance is not sufficient, especially in view of the fact that the test applications apparently were unrelated to paternity identification.

Furthermore, in order to make a proper determination of the advisability of admitting HLA test results in any given case, the foundational information before the court should include the number and type of other blood and tissue tests which have been administered to the persons involved in the litigation and the cumulative effect of the additional tests on the predictive accuracy of the HLA test. As stated in *J.B. v. A.F.*, supra, 285 N.W.2d at 883:

The mean probability of excluding a male who in fact is not the father of a child through HLA testing, alone, is between 78% and 80% for blacks, whites and Japanese. If six systems (ABO, Rh, MNSs, Kell, Duffy and Kidd) plus HLA are used, the cumulative probability of excluding a male who in fact is not the father of a child rises to 91.21% for blacks, 93.34% for whites and 91.42% for Japanese. [Footnotes omitted.]

In the instant case there is no evidence at all that the ABO, Rh, MNSs, Kell, Duffy or Kidd tests were employed, yet the percentage Dr. DeWitt testified to seems to assume that those tests were administered. It may be that there was no necessity for administering these tests, but if so, the record must so demonstrate.

(Footnote Con't. No. 10).

laboratories surveyed, none indicated they routinely used HLA typing in paternity testing. Poloski and Krause, Blood Typing in Disputed Paternity Cases--Capabilities of American Laboratories, 10 Fam. L.Q. 287, 289-92 (1976).

11. HLA tissue typing was originally developed to match donor and recipient pairs for organ transplantation. The inheritance pattern for purposes of paternity testing has only been recently studied. Shaw and Kass, *Illegitimacy, Child Support, and Paternity Testing*, 13 Hous. L. Rev. 41, 56 (1975).

## SUPREME COURT DECISIONS

Also, evidence should be adduced showing the effect, if any, of the particular racial or ethnic origin of the subject on the calculated probability of exclusion or inclusion of paternity. In addition, qualified witnesses should address the significance of the particular genetic markers relied upon, whether they were inherited from only one parent or both, and the frequency with which they may appear in the population at large. As stated in Lee, *Current Status of Paternity Testing*, 9 Fam. L.Q. 615, at 628:

Each genetic marker or system of genetic markers provides different chances of exclusion. . . . The white blood cell isoantigen system alone provides a 76% chance of exclusion. The next 13 systems provide from 32% to 13.8% chance of exclusion. By using the first 4 systems, a cumulative chance of over 90% is reached; by the first 7 systems, a 95% chance; and by all systems, a chance of 99.27%. In practice, only a limited number of laboratories presently have the capability of testing nearly all these genetic markers. The amount of involvement may not be justified by the small increase in chance of exclusion. . . . In the United States, tests with a chance of 70% of exclusion can be carried out by a number of laboratories. If demand and interest increase, the capability of conducting tests with a 90% or higher chance of exclusion could be reached in a short time.

Finally, and in addition, the proponent must establish that the sera used in the test and the sophistication of the laboratory are of the quality necessary to obtain the degree of reliability claimed:

Were blood specimens drawn from the right parties? Were the tests done properly with reliable reagents, suitable instruments, appropriate techniques and by experienced technologists? Were results of the tests correctly interpreted? Has the validity of an indirect exclusion been seriously and carefully examined? Have all the known genetic variations, ethnic differences, as well as physiologic and pathologic conditions been taken into consideration? If any of these aspects are neglected, a true father may be relieved from supporting his child, a true parent may be denied his child, or an immigrant child may be barred from reunion with its true parents. These considerations will become even more pertinent as soon as a variety of genetic markers not yet customarily used in many laboratories are included. [Id. at 625-26.]

See also Footnotes 9 and 10.

For the foregoing reasons, we hold that admission of the HLA test was without proper foundation and was clearly prejudicial error. In view of this conclusion, it is unnecessary to address other assignments of error by the defendant.

Reversed and remanded for a new trial. No costs awarded.

WE CONCUR:

Richard J. Maughan, Justice

D. Frank Wilkins, Justice

CROCKETT, Chief Justice: (Dissenting)

It is my belief that the majority opinion itself demonstrates that the parties have had their entitlement to a fair trial in which the rulings on evidence complained of were well within the latitude of discretion of the trial court and that it is therefore the duty of this Court to affirm the judgment.

There are several propositions which should be considered and which support that conclusion. The first is that this was a trial to the court, and not to a jury. For that reason, the rulings on evidence need not be as restrictive, because the court should be more knowledgeable than a jury in analyzing and determining the weight and effect to be given the evidence.<sup>1</sup>

From the admirably informative and lucid exposition in the main opinion, it appears that the HLA test provides proof to a very high degree of probability on the question of paternity. As the opinion states, Dr. DeWitt was relied on to establish the necessary foundation for its admission. His qualifications were sufficient to satisfy counsel for both sides and the trial court. I see no reason for this Court to doubt either their knowledge or integrity, or the propriety of entering into such a stipulation; and it seems to me quite anomalous for this Court to do so. It being so agreed by the parties, Dr. DeWitt's qualifications should be taken as unquestioned.

As the main opinion states, he testified that the test is highly accurate and has been in use for some fifteen years, and the figures that are used to deduce the possibilities are based on the analysis of a large number of families. He further testified that the test was widely used for medical purposes.

1. See *Del Porto v. Nicolo*, 27 Utah 2d 286, 495 P.2d 811 (1972) and authorities therein cited, including 5A C.J.S. Appeal and Error Sec. 1715, No. 15618.

The opinion also correctly points out that Sec. 78-45a-10 provides that the admissibility of blood tests showing the possibility of paternity is within the discretion of the court; and by sound reasoning points out that the HLA test should be considered as included within that statute.<sup>2</sup>

I heartily approve and subscribe to the statement from *United States v. Stifel*<sup>3</sup> that every new and useful acquisition of knowledge must sometime have its use for the first time; and that neither newness nor lack of absolute certainty in such a test should prevent its results from being received and considered as evidence.

To whatever degree the evidence in question may be lacking in certainty, that should be considered as going to the weight to be given it, rather than to its admissibility. This would have the advantage of allowing the court to receive evidence which appears to have substantial probative value, to be considered along with all of the other evidence in the case, rather than to forego entirely the use of such evidence.

It is upon the basis of what is said in the main opinion and what has been said herein that it is my judgment that there was no prejudicial error, because the receipt of such evidence was well within the latitude of discretion which should be allowed the trial court, and that, consequently the judgment should be affirmed.

---

HALL, Justice, concurs in the dissenting opinion of Chief Justice Crockett.

2. See main opinion and *Cramer v. Morrison*, 88 Cal.App.3d 873, 153 Cal. Rptr. 865 (1979).
3. 433 F.2d 431 (6th Cir. 1970).

# LEUCOCYTE PHENOTYPING TRAY WORKSHEET

Patient Name Carsen, Mary I.D. No. 104  
Race \_\_\_\_\_ Age \_\_\_\_\_ ABO Group \_\_\_\_\_

Control No. LT3-F1

Exp. Date 18 OCT 1984

Date Collected \_\_\_\_\_

Other Patient Data Paternity

Date Plated 1-27-84 By BSS

Date Read 1-27-84 By BSS

Comments Mother

Date Reviewed \_\_\_\_\_ By am

Carsen no Wobles

Phenotype A2, A-, B44, B60

Serum I.D.	Well	Specificity (ies)	Result	Serum I D	Well	Specificity (ies)	Result
001	1A	Positive Control	8	037	7A	B8	1
002	1B	Negative Control		038	7B	B8	
003	1C	A1		112	7C	B12	8
* 004	1D	A1		090	7D	B12	6
005	1E	A2	8	041	7E	Bw44	6
126	1F	A2	8	* 114	7F	Bw45	
* 146	2F	A28,w33,w34		044	8F	B13	
* 117	2E	A28		045	8E	B13	
009	2D	A3		046	8D	B14	
010	2C	A3		047	8C	B14	
013	2B	A9		* 125	8B	B15	
014	2A	A9		* 136	8A	B15	
015	3A	Aw23		* 141	9A	Bw62	
143	3B	Aw24		076	9B	B17	
121	3C	A10		052	9C	B17	
* 020	3D	A25		* 053	9D	B18	
107	3E	A25		054	9E	B18	
* 022	3F	A26,w34		055	9F	Bw16	
* 018	4F	A26,w30		082	10F	Bw38	
024	4E	A11		* 123	10E	Bw39	
079	4D	A11		057	10D	Bw21	
026	4C	A29		140	10C	Bw21	
113	4B	A29		* 106	10B	Bw49	
* 147	4A	Aw30		* 073	10A	Bw22	
084	5A	Aw30,w31		* 139	11A	Bw22	
133	5B	Aw31		092	11B	B27	
* 019	5C	Aw32		093	11C	B27	
120	5D	Aw32		* 064	11D	Bw35,5	
* 119	5E	Aw33,B17		* 138	11E	Bw35	
031	5F	B5		* 065	11F	B37	
* 135	6F	B5		* 065	12F	B37	
033	6E	Bw51		103	12E	B40	8
034	6D	B7		067	12D	B40	8
132	6C	B7		* 081	12C	Bw60	6
* 089	6B	Bw42		* 134	12B	Bw4	4
* 105	6A	Bw42		* 130	12A	Bw6	



EXHIBIT "3"

JENICS Inc



# LEUKOCYTE PHENOTYPING TRAY WORKSHEET

Patient Name Turpin, Angela I.D. No. 702

Race \_\_\_\_\_ Age \_\_\_\_\_ ABO Group \_\_\_\_\_

Control No. LT3-F1

Date Collected \_\_\_\_\_

Exp. Date 18 OCT 1984

Other Patient Data Paternity

Date Plated 1-27-84 By BSS

Date Read 1-27-84 By BSS

Comments Child

Date Reviewed \_\_\_\_\_ By CW

Carlson vs Woods

Phenotype A2, A29, B44, B60

Serum I D	Well	Specificity (ies)	Result	Serum I D	Well	Specificity (ies)	Result
001	1A	Positive Control	8	037	7A	B8	1
002	1B	Negative Control		038	7B	B8	
003	1C	A1		112	7C	B12	8
* 004	1D	A1		090	7D	B12	
005	1E	A2	8	041	7E	Bw44	8
126	1F	A2	8	* 114	7F	Bw45	
* 146	2F	A28,w33,w34		044	8F	B13	
* 117	2E	A28		045	8E	B13	
009	2D	A3		046	8D	B14	
010	2C	A3		047	8C	B14	
013	2B	A9		* 125	8B	B15	
014	2A	A9		* 136	8A	B15	
015	3A	Aw23		* 141	9A	Bw62	
143	3B	Aw24		076	9B	B17	
121	3C	A10		052	9C	B17	
* 020	3D	A25		* 053	9D	B18	
107	3E	A25		054	9E	B18	
* 022	3F	A26,w34		055	9F	Bw16	
* 018	4F	A26,w30		082	10F	Bw38	
024	4E	A11		* 123	10E	Bw39	
079	4D	A11		057	10D	Bw21	
026	4C	A29	8	140	10C	Bw21	
113	4B	A29	8	* 106	10B	Bw49	
* 147	4A	Aw30		* 073	10A	Bw22	
084	5A	Aw30,w31		* 139	11A	Bw22	
133	5B	Aw31		092	11B	B27	
* 019	5C	Aw32		093	11C	B27	
120	5D	Aw32		* 064	11D	Bw35,5	
* 119	5E	Aw33,B17		* 138	11E	Bw35	
031	5F	B5		* 065	11F	B37	
* 135	6F	B5		* 065	12F	B37	
033	6E	Bw51		103	12E	B40	
034	6D	B7		067	12D	B40	
132	6C	B7		* 081	12C	Bw60	
* 089	6B	Bw42		* 134	12B	Bw4	
* 105	6A	Bw42		* 130	12A	Bw6	

PLAINTIFF'S  
EXHIBIT

EXHIBIT "4"

GENE Inc



LA HLA-ABC Second TRAY - LOT NO. 28

DATE

**SEX**

# RACE

# AGE

**FIRST**

**ABO**

# DISEASE

**CENTER**

## ANTIGEN GROUPS OBTAINED

## INVESTIGATOR

## COMPLEMENT I

[illegible]

# T-CELL LYMPHOCYTE TESTING

**LEADING DIRECTIONS** is given by the arrows.

had in a serpentine order starting with well 1A. In well 1A is the negative control, and in well 1B is the positive control.

## TESTING CONDITIONS

10 to 2,000 lymphocytes in 1 lambda, incubate 30 min. with antibody, 60 min.

## RECORDING SCALE

1. Negative (same viability as well 1A)  
2. Doubtful negative  
4. Doubtful positive  
6. Positive (viability is noticeably different from well 1A)

UCLA TISSUE TYPING LABORATORY



**PAUL I. TERASAKI, Ph.D.**

UNIVERSITY OF CALIFORNIA - LOS ANGELES

**LODD VETERANS AVENUE**

LOS ANGELES, CALIFORNIA 9002



# TRAY WORKSHEET

Control No. LT3-D3

Exp. Date 18 AUG 1984

Comments

Johns Ns

Patient Name

I.D. No.

8220

Race

Age

ABO Group

OBS

Date Collected

10-20-83

Other Patient Data

Date Plated

10-20-83

By BS

Date Read

" " "

By [Signature]

Date Reviewed

By

Phenotype

A1A29 B8B44

Serum I.D.	Well	Specificity (ies)	Result	Serum I.D.	Well	Specificity (ies)	Result
001	1A	Positive Control	8	037	7A	B8	8
002	1B	Negative Control	1	038	7B	B8	8
003	1C	A1	8	112	7C	B12	8
* 004	1D	A1	8	090	7D	B12	8
005	1E	A2	1	041	7E	Bw44	6
095	1F	A2	1	114	7F	Bw45	1
* 008	2F	A28,w34,B8	8	044	8F	B13	1
* 117	2E	A28	8	045	8E	B13	1
009	2D	A3	1	046	8D	B14	1
010	2C	A3	1	047	8C	B14	1
013	2B	A9	1	* 125	8B	B15	1
014	2A	A9	1	127	8A	B15	1
015	3A	Aw23	1	* 049	9A	Bw62	1
078	3B	Aw24	1	* 049	9B	Bw62	1
121	3C	A10	1	076	9C	B17	1
* 020	3D	A25	1	052	9D	B17	1
107	3E	A25	1	053	9E	B18	1
* 022	3F	A26,w34	1	054	9F	B18	1
* 018	4F	A26,w30	1	055	10F	Bw16	1
024	4E	A11	1	082	10E	Bw38	1
079	4D	A11	1	* 123	10D	Bw39	1
025	4C	A29	8	057	10C	Bw21	1
113	4B	A29	8	* 106	10B	Bw49	1
133	4A	Aw31	1	* 118	10A	Bw50	1
084	5A	Aw30,w31	1	* 073	11A	Bw22	1
* 019	5B	Aw32	1	092	11B	B27	1
120	5C	Aw32	1	093	11C	B27	1
* 119	5D	Aw33,B17	1	* 064	11D	Bw35,5	1
031	5E	B5	1	099	11E	Bw35	1
* 135	5F	B5	1	* 065	11F	B37	1
032	6F	Bw51	1	* 065	12F	B37	1
033	6E	Bw51	1	103	12E	B40	1
034	6D	B7	1	067	12D	B40	1
132	6C	B7	1	* 081	12C	Bw60	1
* 089	6B	Bw42	1	* 134	12B	Bw4	1
* 105	6A	Bw42	1	* 130	12A	Bw6	1

\* Refer to reverse side for additional specificity characteristics

PLAINTIFF'S  
EXHIBIT

EXHIBIT "5"

ICS Inc

# UCLA HLA-ABC Second TRAY - LOT NO 28

Woods Edward (Johns V)

UCLA

Dep

LAST NAME	FIRST	CENTER	INVESTIGATOR
20-83	OBs Potomity	HLA-2160 B15	
BLEEDING DATE	SEX	RACE	AGE
ABO	DISEASE	ANTIGEN GROUPS OBTAINED	COMPLEMENT LOT

ROW	1						2						3						4						5					
DL NO.	A	B	C	D	E	F	F	E	D	C	B	A	A	B	C	D	E	F	F	E	D	C	B	A	A	B	C	D	E	F
ACTION		8	6	8														4	4/8									8	8	8
CIFICITY			1	1	2	3	9	23	24	10	25	26	33	11	11	28	2	29	29	30	30	32	5	5	51	7	7	8	8	12
			36									34	34			28			31	13	25		49			42				
ERUM	NS	ALS	M4346.B0	F9234.01	M4648.A0	C4051.J2	L7183.B0	M4187	M4639	M1732.A0	M3628	M0618	G9297.A1	M1799.01	M4212	M0600.02	M5142	M4960.A0	M4570.A0	M3438	L9862.F0	M3408.G0	M5171	L6944.D0	L0778.01	M1688	M1645.A0	M3244.B0	M4189	M2116.B0

ROW	6						7						8						9						10					
L. NO.	F	E	D	C	B	A	A	B	C	D	E	F	F	E	D	C	B	A	A	B	C	D	E	F	F	E	D	C	B	A
CTION	4																													
IFICITY	44	45	13	14	15	62	16	39	17	17	18	18	21	50	22	54	55	27	27	35	35	37	40	40	60	41	CW1	CW2	CW3	CW4
RUM	L9849.01	M5267	M5196	M2112.A0	L7710.C0	M2759.B0	M1428.B0	M5583.B0	M5213	M2239.01	M4789.B0	M4790.C0	M3005.A0	M4602	M4229	M4312.01	M3295.A0	L8585.02	M4933	M1479.01	M3661	M2834.C0	M5193.A0	M3451.A0	M5561	M4351	M3236.B0	M5208.B0	M5219.A0	M4600

## CELL LYMPHOCYTE TESTING

**TESTING DIRECTIONS** is given by the arrows.  
a serpentine order starting with well 1A. In well 1A is the negative control,  
well 1B is the positive control.

### TESTING CONDITIONS

to 2,000 lymphocytes in 1 lambda, incubate 30 min. with antibody. 60 min.

## RECORDING SCALE

- 1- Negative (same viability as well 1A)
- 2- Doubtful negative
- 4- Doubtful positive
- 6- Positive (viability is noticeably different from well 1A)

## UCLA TISSUE TYPING LABORATORY



PAUL I. TERASAKI, Ph.D.  
UNIVERSITY OF CALIFORNIA - LOS ANGELES  
1000 VETERAN AVENUE  
LOS ANGELES, CALIFORNIA 90024

# HLA COMPREHENSIVE TRAY



Control No. LT4-F1

Exp. Date June 12, 1985

## SPECIFICITY CHARACTERISTICS

<u>Specificity(ies)</u>	<u>Serum I D</u>	<u>Well No</u>	
A1,w36	004	1D	Weak reactions may occur with HLA-Aw36 positive cells. Results are based on fewer than required HLA-Aw36 positive cells.
Aw24	151	2B	Weak or negative reactions may occur.
A26	109	3B	Weak reactions may occur.
A28,w33,w34	160	3F	Weak or negative reactions may occur with HLA-Aw34 positive cells.
Aw31	133	4B	Weak reactions may occur.
Aw33,w31	196	5B	False positive reactions may occur with HLA-A29 and HLA-Aw30 positive cells.
Aw33,w34	231	5C	Weak or negative reactions may occur with HLA-Aw34 positive cells.
Bw45	225	6A	Results are based on fewer than required positive cells
Bw62	161	8F	Weak reactions may occur.
Bw38	082	8D	Results are based on fewer than required positive cells
Bw39	202	8C	Weak reactions may occur.
Bw22	218	9F	Weak reactions may occur.
Bw42,w22	221	10E	Weak reactions may occur with HLA-Bw42 positive cells
Bw53,5	135	11A	Weak or negative reactions may occur with HLA-Bw53 positive cells.
B37	065	11B	Weak reactions may occur.
B40	206	11D	False positive reactions may occur with HLA-B7 positive cells

EXHIBIT "7"

For additional information call (800) 426-0382 in CA (714) 898-7690

**COOPER**   
Biomedical

Printed in USA

C L T C 01

Revised May 1984

Diagnostic Division, Garden Grove CA 92641 USA  
Cooper Biomedical Inc. Malvern PA 19355 USA

**Accugenics®**

# HLA COMPREHENSIVE TRAY WORKSHEET

Patient Name Carlson, Greg I.D. No. 889

Race \_\_\_\_\_ Age \_\_\_\_\_ ABO Group O

Date Collected 9-26-84

Other Patient Data Pat.

Date Plated 9-26-84 By SE

Date Read " " " By DR

Date Reviewed \_\_\_\_\_ By CW

Phenotype A2, A2, B7, B44

Control No. LT4-F1

Exp. Date June 12, 1985

Comments Paternity  
Woods vs Carlson

Serum I.D.	Well	Specificity (ies)	Result	Serum I.D.	Well	Specificity (ies)	Result
001	1A	Positive Control	8	045	7A	B13	
002	1B	Negative Control		168	7B	B13	
003	1C	A1		047	7C	B14	
* 004	1D	A1,w36		167	7D	B14	
126	1E	A2	8	184	7E	B15	
182	1F	A2	8	185	7F	B15	
009	2F	A3		* 161	8F	Bw62	
227	2E	A3		055	8E	Bw16	
014	2D	A9		* 082	8D	Bw38	
180	2C	Aw23		* 202	8C	Bw39	
* 151	2B	Aw24		199	8B	B17	
169	2A	A10		076	8A	B17	
107	3A	A25		054	9A	B18	
* 109	3B	A26		233	9B	B18	
024	3C	A11		140	9C	Bw21	
172	3D	A11		224	9D	Bw21	
145	3E	A28		106	9E	Bw49	
* 160	3F	A28,w33,w34		* 218	9F	Bw22	
113	4F	A29		139	10F	Bw22	
228	4E	A29		* 221	10E	Bw42,w22	
147	4D	Aw30		092	10D	B27	
084	4C	Aw30,w31		093	10C	B27	
* 133	4B	Aw31		138	10B	Bw35,w53	
019	4A	Aw32		164	10A	Bw35,w53	
120	5A	Aw32		* 135	11A	Bw53,5	
* 196	5B	Aw33,w31		* 065	11B	B37	
* 231	5C	Aw33,w34		175	11C	B37	
204	5D	B5		* 206	11D	B40	
033	5E	Bw51		103	11E	B40	
034	5F	B7	8	149	11F	Bw60	8
132	6F	B7	8	144	12F	Bw4	8
037	6E	B8		162	12E	Bw6	8
038	6D	B8		173	12D	Cw1	
090	6C	B12	8	171	12C	Cw2	
211	6B	Bw44	8	198	12B	Cw3	
* 225	6A	Bw45		087	12A	Cw4	

EXTENDED RED CELL

Assoc. Regional & University Pathologists

Date: 1-30-84

Technologist DZ

No.-Name	anti-A	anti-B	anti-AB	A <sub>1</sub> Cell	A <sub>2</sub> Cell	B Cell	O Cell	Coombs		Control
								Direct	Indirect	
4 Wilson Mary	4+	○	4+	○		4+		neg. ✓		○
12 pin Angela	4+	○	4+	○		1+		neg. ✓		○

No.-Name	D	CDE	D <sup>u</sup>	C	D <sup>w</sup>	c	e	E	M	N	S	anti-S	Fy <sup>a</sup>	Fy <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	K	k	
4 Wilson Mary	○		○	○		4+	4+	○	1+	1+	3+	○	2+	1+	2+	1+			All controls good
2 pin Angela	3+	.		4+		4+	3+	○	2+	○	2+	3+	○	3+	1+	○			16 panels colls ex. date 2-9-84

No.-Name	Phenotype
24 Wilson Mary (M)	A <sub>1</sub> / dce / MNS / Fy <sup>a</sup> b / Jk <sup>a</sup> b
12 pin Angela (ch)	A <sub>1</sub> / DCce / MSS / Fy <sup>b</sup> / Jk <sup>a</sup>

EXHIBIT "8"

PLAINTIFF'S  
EXHIBIT

### c. Regional & University Pathologists

Date: 10-1-84

Technologist: Page

Name	anti-A	anti-B	anti-AB	A <sub>1</sub> Cell	A <sub>2</sub> Cell	B Cell	O Cell	Coombs		Control	A <sub>1</sub> Lectin
								Direct	Indirect		
Carlson Greg	=	=	=	4+	3+	3+	=	=		=	

Name	D	CDE	D <sup>u</sup>	C	D <sup>w</sup>	c̄	ē	E	M	N	anti-S		Fy <sup>a</sup>	Fy <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	K	k̄
											S	s̄						
Carlson Greg	4+			3+		2+	3+	=	=	3+	3+	2+	2+	=	=	3+		

Name	Phenotype
Carlson Greg	O D Cc̄ē NSs Fy <sup>a</sup> a Jk <sup>b</sup> b

UNIVERSITY HOSPITAL  
UNIVERSITY OF UTAH

**DISCHARGE SUMMARY**

NAME: TURPIN, MARY

CLASS:

UNIT: ObGyn

50-13-14/

HOSP. NO.

DATE ADMITTED: 7/22/83

DATE DISCHARGED 7/28/83

ATTENDING PHYSICIAN:

James R. Scott, M.D.

INTERN:

L. Michael Kettel, M.D.

RESIDENT:

Gayle Carter, M.D.

CHIEF COMPLAINT:

Uterine contractions.

PRESENT ILLNESS:

The patient is an eighteen year old white female g-1, p-0 followed in teen mother clinic at 40-weeks gestation with complaints of uterine contractions beginning at approximately 0300 a.m. day of admission, now q3-4 minutes apart. One day prior to admission the patient was seen in clinic and discovered to have an active herpetic lesion on the right labia. The lesion was cultured and sent to lab, results not available at the time of admission. Cervix was fingertip 50% minus two. Her pregnancy has otherwise been uncomplicated.

PAST MEDICAL HISTORY:

Medical- positive GC culture 8/82, urinary tract infection times one, congenital scoliosis

Allergies- none known. Medications- none. Surgeries- none. Prenate labs- blood type 'A' negative, rubella 1 to 32, RPR negative.

FAMILY HISTORY:

Father/paternal grandmother with hypertension.

SOCIAL HISTORY:

Single female, lives with parents.

SYSTEMS REVIEW:

Negative.

PHYSICAL EXAM:

GU- right herpetic lesion in labia as noted in clinic, previously there was no vaginal or cervical lesions apparent. Pelvic- cervix 1 cm. dilated 60-70% effaced minus two station with vertex presentation by Leopold's, fetal heart tones 144 regular.

HOSPITAL COURSE:

The patient was admitted and placed on monitor and approximately two hours after admission the patient was rechecked and found to be almost completely dilated zero station and 100% effaced. At this time it was decided to take the patient to C-section for suspicious herpetic lesions. The patient was taken to operative suite where primary low transverse C-section was performed without difficulty.

The patient was placed on Ampicillin intra-operatively. She delivered a viable healthy female infant with Apgars 8&9 under spinal anesthesia. One day post-op herpes cultures returned from lab as grossly positive. She had an uncomplicated post-op course until the fifth post-partum day when it was noted that she had a b/p 138/98 and this remained elevated for next two post-op days being systolic in range of 140-124/80-100. An SMA7 and urinalysis were obtained which revealed normal results, BUN 14, creatinine 0.7 and urine was clear.

It was elected to discharge the patient at this time with followup as outpatient.

POSTPARTUM AND/OR NEWBORN REFERRAL  
FOR PUBLIC HEALTH NURSING

UNIVERSITY HOSPITAL  
UNIVERSITY OF UTAH

-L  
713 65  
open

NAME

ADDRESS

50-13-14-9 A 07-22-83  
TURPIN MARY  
914796-8 F 03-31-65 619  
392 BRAHMA DR MURRAY UT  
84107

DATE

7/28/83

PARENTS OR HUSBAND

Melvin Stanger (Mother)

DIAGNOSIS AND PROGNOSIS

TUP & active herpes

PHYSICIAN'S INSTRUCTIONS REGARDING CARE:

MEDICATIONS AND TREATMENTS:

Hydrex 3

DIET

Select

ACTIVITY

As tolerated

SPECIAL REQUESTS OR REMARKS

DATE AND TIME OF CLINIC RETURN

August 4, 1983 Then Mom Clinic

PHYSICIAN'S SIGNATURE

NURSING INFORMATION:

18 yo White ♀ admitted in active labor.

reporting cts of 3-4 min - active labor. C-section for active herpes. Pt is single parent living w/ parents. Under good care of Baby. Stay in the hospital was complicated by a rise in blood pressure. Pt will be seen Aug 8 in clinic for BP check-up. PH - mom program given.

M. Sullivan

NURSE'S SIGNATURE





# Office of the Salt Lake County Attorney

**TED CANNON**  
County Attorney



May 3, 1984

Mark S. Miner  
Attorney at Law  
525 Newhouse Building  
10 Exchange Place  
Salt Lake City, Utah 84111

RE: State of Utah  
Vs. Edward L. Woods

Dear Mr. Miner:

Enclosed is a copy of the blood test results for your information.

Very truly yours,

TED CANNON, Salt Lake County Attorney

SANDY MOON,  
Deputy County Attorney

SM:bl

Encl.

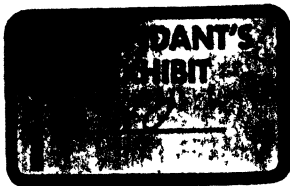


EXHIBIT "10"

231 East 4th South Salt Lake City, Utah 84111 (801) 363-7900

Investigative Agency  
Don Harman  
Special Agent in Charge  
4th Floor

☐ Administration  
Michael N. Martinez  
Chief Deputy County Attorney  
4th Floor

☐ Recovery Division  
Donald Sawaya, Chief Deputy  
4th Floor

☐ Justice Division  
John T. Nielsen, Chief Deputy  
3rd Floor

☐ Civil Division  
William R. Hyde, Chief Deputy  
2nd Floor

University of Utah Medical Center, Salt Lake City, UT

GENETIC MARKER ITEM	PHENOTYPE			PATERNITY INDEX
	CHILD	MOTHER	ALLEGED FATHER	
IE	TURPIN ANGELA	CARLSON MARY A.	WOODS EDWARD	
I	A1 A2, A29 B44, B60	A1 A2, A2 B44, B60	O A1, A29 B8, B44	.91 8.6 ND ND ND ND
S				
I				
d				
fy				
SIGNED PATERNITY INDEX				9.51
PROBABILITY OF EXCLUSION OF NON-FATHER (PROBABILITY OF PATERNITY)				90.48 %

E: 26 APRIL 1984  
 .. RAB

\_\_\_\_\_  
*C.W. DeWitt*  
 Charles W. DeWitt, Ph.D.  
 Prof. and Director

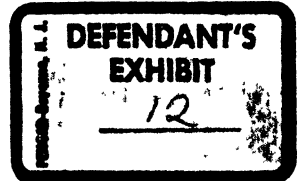
\_\_\_\_\_  
 Neal S. Rote, Ph.D.  
 Asst. Prof. and Assoc. Director

EXHIBIT "11"

THE  
UNIVERSITY  
OF UTAH

DEPARTMENT  
OF PATHOLOGY  
SCHOOL OF MEDICINE  
SALT LAKE CITY, UTAH 84132  
801-581-7773

October 25, 1983



Sandy Mooy  
231 East 400 South  
Fourth Floor  
Salt Lake City, Utah 84111

Edward Woods  
4367 Gordon Lane  
Murray, Utah 84107

Dear Sir:

The results of testing of blood samples received in our laboratory are:

<u>Name</u>	<u>ABO</u>	<u>HL-A</u>
Johns, Bonnie (mother)	A	A2,A24,B51,B21
Miller, Amanda (child)	A	A1,A24,B8,B21
Woods, Edward	O	A1,A29,B8,B45

Interpretation:

Mr. Woods cannot be excluded as the father on the basis of either ABO or HL-A typing. The probability of paternity for Mr. Woods as the father of Amanda is 76%.

If more than one man, in addition to Mr. Woods, is considered as a putative but untested father, the probability of paternity for Mr. Woods is as follows:

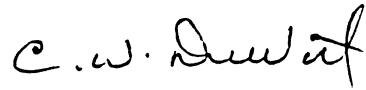
<u>Number of sexual consorts at time of conception</u>	<u>probability</u>
3	61%
4	51%
5	44%

The probability of paternity is calculated by comparing a) the probability that a mating of a random male in the population (same race as the putative father) with a female of mother's phenotype would produce an offspring of the child's phenotype, and b) the probability that a mating of a male of the putative father's phenotype with a female of the mother's phenotype would produce such an offspring. Probabilities of less than 90% are considered to be inconclusive.

CONFIDENTIAL

If I may be of further assistance, please advise me.

Sincerely,

A handwritten signature in cursive script, reading "C.W. DeWitt".

C.W. DeWitt, Ph.D.  
Professor

Neal S. Rote, Ph.D.  
Assistant Professor

CWD:jl